

Retaining Offenders in Mandatory Drug Treatment Programs: The Role of Perceived Legal Pressure

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Chapter One:

Introduction and Background to the Research

Introduction

Huge increases in arrests and jail and prison commitments over the past decade has fueled a spate of programs that use drug treatment as an alternative or adjunct to traditional criminal justice sanctions. Long-standing efforts, such as Treatment Alternatives to Street Crime (TASC) programs, have undergone expansion (Turner, 1996; Swartz, 1993), and several new models have been tried and evaluated, including probation or parole programs that combine treatment with intensive supervision (Turner et al., 1994) or case management (Martin & Inciardi, 1993), and specialized drug courts (Belenko, 1996; Goldkamp, 1994). Occasionally, these programs are born out of the recognition that conventional custodial sanctions have little or no effect on the recidivism of drug offenders (Fagan, 1994; Belenko et al., 1994), and the belief that they reduce their participants' chances of returning to crime and the criminal justice system. More commonly, it is the prohibitive cost of constantly expanding jail and prison capacity that draws public officials to programs designed to divert offenders to drug treatment.

Many judges, prosecutors and other officials, however, remain reluctant to use these programs because they are viewed as ineffective, revolving door responses to drug-involved offenders. These impressions cannot be disputed from the general treatment literature. Rates of attrition in drug treatment range from 40 to 90%, and those at greatest risk for dropout share characteristics common to incarcerated populations – young, disproportionately African-American, with a criminal record, and an unstable social and vocational history (Anglin & Hser, 1990a; Stark, 1992; Steer, 1983). But the attrition data belie equally important findings about treatment success: Persons who attend and *remain in treatment* for a sufficient duration show reduced criminal recidivism and other favorable outcomes (French et al., 1993; Ball et al., 1988; Simpson, 1981). Treatment

retention has come to be viewed as a critical outcome measure, and one of the best predictors of a client's long-term success (Gerstein & Harwood, 1990).

Consensus about the primacy of retention in treatment underlies a widespread interest in how the powers of the criminal justice system can be used to pressure offenders to enter and remain in treatment. Alongside descriptions and evaluations of specific treatment diversion programs is a growing body of theoretical and empirical literature focused on legally-coerced treatment (Anglin & Hser, 1990b; Rotgers, 1992; Gostin, 1991; Leukefeld & Tims, 1988). The great majority of this literature has argued for wider use of mandatory treatment, with the common theme that "legal coercion works" (Leukefeld & Tims, 1990; Anglin & Maugh, 1992; De Leon, 1988). This notion has proven popular among policy makers striving to maintain public safety while reducing custodial costs – and compelled to maintain an image of 'toughness' while searching for long-term solutions to the drugs and crime conundrum.

The proliferation of mandatory treatment programs and arguments for their expansion have tended to overshadow more sober assessments of the effects of legal pressure or coercion in drug treatment. Advocates who have popularized the "carrot and stick" approach to drug treatment rarely acknowledge that "[r]esearch on the performance and outcomes for addicts coerced into treatment...has not produced consistent findings" (Anglin & Hser, 1990a, p. 438). A research review which concludes that "coercion may not carry the promise" claimed by its advocates (Rotgers, 1992, p. 409), or the argument that coercion is clinically inimical to the goals of treatment and runs counter to the processes of change necessary in recovery (Miller & Rollnick, 1991; Shottenfeld, 1989), are much less widely cited than reviews that emphasize favorable findings about coerced treatment.

Facing and resolving some of the equivocal findings in this field, however, should reduce opposition to mandatory treatment programs. As detailed in the next section, a review of research results on coerced treatment suggests that inconsistent findings can at least partly be traced to overly simple conceptual and methodological approaches used in many earlier studies. Indeed, one would *expect* widely different outcomes from criminal justice-involved treatment clients, given the varying types and levels of legal pressure

they experience. Unfortunately, much of the previous research has failed to take such complexities into account – either in theoretical terms, or simply in acknowledging the diversity of criminal justice and treatment settings in which legal pressure is used, and the individual differences among treatment-mandated offenders.

Developing and testing improved methods of studying the effects of legal pressure in drug treatment were central objectives of the research described in this report. Shifting the focus from simple comparisons of voluntary and coerced clients, this study examined the relationship between legal pressure and drug treatment retention by assessing *perceptions of legal pressure* held by two groups of legally-mandated treatment clients: participants of the Drug Treatment Alternative to Prison (DTAP) program and a matched group of probationers, parolees, TASC and other court-mandated clients attending the same community-based treatment programs used by DTAP.

Developed and operated by the Office of the Kings County (Brooklyn) District Attorney in New York City, DTAP was selected for study because of the program's uniquely coercive program components (e.g., the threat of a legally-mandatory prison term for non-compliance, an apprehension unit specifically assigned to the program), and its exceptional record of participant retention and completion (64% of the program's participants stay a year or more – a rate 2-4 times greater than those reported in the literature for the kinds of long-term residential programs used by DTAP).

This research was designed (1) to test whether DTAP participants would show ^① DTAP → Retention significantly higher retention rates, when compared against a matched sample of other ^② legally-mandated treatment clients; and (2) to assess the role of perceived legal pressure ^{PLP → Retention} (PLP) in predicting retention for both of these groups. Analyses tested the unique and combined effects of PLP and other factors on retention, which was tracked for at least six months after admission to treatment. More specific research questions addressed by the study are listed at the end of this chapter, following a review of prior studies on mandatory treatment and other literature informing development of the PLP measure.

Prior Research on Coerced Treatment

Probably the two most methodologically sound studies that have reported favorable effects of legal pressure in drug treatment are the research on the California Civil Addict Program (CAP), and the Treatment Outcome Prospective Study (TOPS). Although the original CAP research was performed several years ago (McGlothlin et al., 1977; Anglin & McGlothlin, 1984), results obtained from participants of this civil commitment program that operated in the '60s and '70s have been the focus of numerous recent articles on the efficacy of compulsory treatment (Anglin, 1988; Anglin & Hser, 1990b; Anglin & Maugh, 1992). The only study in the current literature that approximates a controlled study of legally-coerced treatment, the CAP research involved a "natural experiment" that compared a group of addicts committed to methadone maintenance with addicts committed to the same program but discharged soon thereafter due to legal errors. Relative to the discharged group, those who were legally committed and supervised reported significant reductions in drug use and crime over an 11-13 year follow-up period.

Evidence of greater success during and after treatment for legally-coerced clients was also found in the TOPS research (Hubbard et al., 1989; Collins & Allison, 1983), which involved over 11,000 persons attending a broad range of drug treatment modalities at several sites around the country. Compared to other subjects in the study, TOPS subjects who were referred from criminal justice sources stayed in treatment longer and showed less drug use after treatment. This effect for coerced treatment remained when pre-treatment differences between voluntary and legally-referred treatment clients were statistically controlled.

Findings from other studies that have compared outcomes of criminal justice-referred persons with voluntary admissions are more mixed.¹ Of the more recent studies that have

¹ In most studies, "voluntary" clients are simply all those not referred to treatment by a criminal justice system agent or source. In the interests of clarity and brevity, we have had to take a similar approach, and limit the discussion here and throughout the text to the role of *legal* coercion in drug treatment—coercion that is a function of the individual's status in the criminal justice system. While other forms of coercion (from employers and family members, for example) are experienced by persons in treatment, they (and related literature) are not considered here, except as part of a set of other, distinct factors that may influence treatment outcome.

similarly assessed whether type of referral (criminal justice vs. voluntary) is associated with retention, two report more favorable results for legally-referred clients in bivariate analyses, however, this effect does not hold when additional predictor variables are included in multivariate analyses (Siddall & Conway, 1988; Steer, 1983). One study of retention in therapeutic community (TC) programs found longer stays for court-referred clients, although there were no attempts to control for possible covariates in this research (Pompi & Resnick, 1987), and results from another study of TCs suggest that the beneficial effects of legal referral on retention are limited to the early part of a client's treatment stay (Condelli, 1989). Earlier TC research has been reviewed by De Leon (1988), who concluded that criminal justice-referred clients appear to stay in treatment for longer periods than voluntary clients, although both types of clients are equivalent on other outcomes when their pre-treatment differences are controlled. Finally, two of the more rigorous studies which have *not* found greater retention or other more favorable outcomes for legally-referred clients include the Drug Abuse Reporting Program (DARP), a large scale, multi-site precursor to TOPS (Simpson & Friend, 1988), and a recent investigation that utilized survival analysis techniques to assess eight predictors of retention, which found legal supervision to be one of only three variables *not* related to the retention outcome (Hser, Anglin, & Liu, 1991).

In looking at these inconsistent findings, most reviewers still find the evidence as supportive of coerced treatment, arguing that as long as coerced clients *do no worse than* other clients, the use of legal coercion should be expanded because it serves to induce individuals who would not otherwise enter programs to participate in and benefit from treatment. In recent, well-controlled studies, Anglin and colleagues (Anglin et al., 1989; Brecht et al., 1993) present evidence showing equivalent outcomes for voluntary and coerced clients to argue for the value of coerced treatment. Regardless of the standards of evidence, however, there is little question, based on previous research findings, that the effects of legal coercion are variable.

Most who view the findings as supportive, and call for expanded use of compulsory treatment, do so with caveats – citing ethical, legal and moral concerns about compelling treatment participation (Platt et al., 1988; Webster, 1986; Collins & Allison, 1983), or the

practical problems of (and past failures at) joining the criminal justice and treatment systems (Greenwood, 1995; Goldkamp, 1994; Anglin & Hser, 1990b; De Leon, 1988). And a few remain unconvinced of the value of coerced treatment, either on the basis of past research (Rotgers, 1992; Stitzer & McCaul, 1987; Weisner, 1990),² or clinical concerns about the recovery and change process (Miller & Rollnick, 1991; Shottenfeld, 1989). Regardless of their interpretation of past findings, however, many reviewers point to methodological and conceptual failings in the earlier research that could explain some of the inconsistent results. Most also agree that, given the heightened level of interest in coerced treatment, there have been perilously few studies in this emerging policy area.

Improvements to the Research. Although research advances will continue to be limited by the practical and ethical problems of conducting controlled experiments of coerced treatment, future studies can improve upon the retrospective methods common to much previous research (Leukefeld & Tims, 1988). In general, prospective approaches yield more valid data and afford more rigorous controls over both the central study variables (e.g., types of legal coercion) and extraneous "noise" variables. There are numerous variables that have been shown to be related to retention and other outcomes.³ In identifying the independent effects of legal coercion on outcome, as well as its role in interactive relationships, research must carefully collect and analyze data on these other variables.

² Rotgers (1992) offers perhaps the most dubious assessment of the current state of knowledge on coerced treatment, arguing that increased public demands for responses to the social and economic costs of substance abuse has spurred "officially sanctioned belligerence" on the part of public officials and the media toward substance abusers, including an "increasing willingness...to advocate forceful means of prodding substance abusers into treatment" (p. 403-404). In reviewing the methodological weaknesses of the CAP research, and the inconsistent findings of other studies examining the impacts of coercion on outcome, Rotgers sees only modest empirical support for coercive approaches. He also underscores the troubling ethical, legal and practical implications of the fact that, "in spite of reported treatment success rates that hover in the 50-60% range at best, and many, many findings of poorer rates of long-term abstinence, coercive agents continue to refer individuals to unproved treatment programs without any clear-cut therapeutic rationale" (p. 412).

³ Studies have identified numerous such factors, ranging from demographic and personal history variables, such as age, race, type and severity of drug use, and psychiatric symptomatology (Hser et al., 1991; Steer, 1983; McLellan et al., 1983), to motivational factors such as readiness for treatment and pressure from other sources (Simpson & Joe, 1993; De Leon et al., 1994; Condelli, 1989), and program factors such as modality, setting or environment, and therapist attributes (Brown et al., 1985; Friedman et al., 1986; Kleinman et al., 1991).

Conceptual improvements to the earlier research include developing more precise definitions of legal pressure and conceptual frameworks for explaining or predicting the differential effects of coercion (De Leon, 1988; Weisner, 1990; Condelli, 1989; Rotgers, 1992; Platt et al., 1988). Study designs which simply compare outcomes for legally-referred and voluntary clients (e.g., Pompei & Resnick, 1987; Steer, 1983) imply that coercion is no more than a unitary, on-off condition. Important improvements to this approach include the TOPS research (Hubbard et al., 1989), which compared outcomes of two different criminal justice-involved groups in addition to a group not referred from criminal justice sources, and recent studies which assessed where outcomes for clients under different types of legal supervision (Anglin, 1988), and under varying (low, moderate and high) levels or degrees of legal coercion (Anglin et al., 1989; Brecht et al., 1993; Condelli, 1989) have been assessed.

In a brief but important conceptual analysis of the role of coercion in treatment, De Leon (1988) suggested the need for further distinctions, observing that "voluntary" clients, while not actually referred to treatment by a criminal justice source, may be legally *involved* and thus experience or perceive legal coercion, while legally-referred clients may *not* perceive any coercion or pressure. De Leon argued that "[f]ailure to distinguish among these subgroups of voluntary and non-voluntary clients has introduced unmeasured error associated with the legal referral or legal status variables commonly used in research" (p. 170).

The view that the client's *perception* of legal pressure is central to affecting behavior (in this case, retention) finds a parallel in the literature on criminal deterrence, and research on the effects of perceived certainty and severity of punishment (Paternoster, 1987). The notion that research must account for varying degrees and types of legal coercion is also found in other discussions of the topic (Platt et al., 1988; Weisner, 1990; Condelli, 1989; Rotgers, 1992). Again, with few exceptions, there have been no attempts to integrate this more complex view of coercion in empirical research.

There have also been calls for more detailed studies of how legal coercion operates – for research that identifies and assesses the factors or dimensions of legal coercion that are responsible for its variable effects, and, ultimately, for studies that show how legal

coercion can be enhanced or applied in specific ways to maximize its impacts on retention and other favorable outcomes.⁴ It is evident that new methods for measuring legal coercion are needed.

The Perception of Legal Pressure (PLP) Questionnaire

The notion of creating a measure to assess perceived legal pressure originated from a series of discussions held in 1991 and '92 with administrators and treatment personnel involved in the Brooklyn DA's DTAP program. Familiar with the TOPS research and other literature on coerced treatment, DTAP planners were well aware of the potential power of legal pressure, and had creatively designed the program to *take advantage* of New York's mandatory sentencing statutes. Findings from operational research that emerged during the first few years of the program supported their working hypothesis that high retention rates would follow from the DTAP "hammer" – the threat of a mandatory prison sentence.

Another level of questions soon arose about the relative impacts of different coercive elements that were operating in the program. Was it primarily the severity of the sentence? The program's specialized warrant team? The mandatory nature of the penalty for failure? One parsimonious approach to these questions, hinted at in De Leon's (1988) analysis, was to ask mandated clients about their experience of different aspects of legal pressure. Potential questionnaire items designed to tap treatment clients' views of legal pressure were developed and preliminarily tested, based on discussions with practitioners

⁴ Perhaps the most carefully reasoned of these comes from Platt et al. (1988), who assert that:

There is almost a complete lack of knowledge about the specific aspects of [coercive treatment strategies] that affect change in addict behavior...Essentially, there is a need for a 'typology' of pressure that can be applied to the addict and an increasingly refined understanding of the differential effects of such pressures...

The probable existence of different types and effects of legal pressures and the interaction of these with patient variables raises important ethical issues... [T]he effectiveness of some pressures and the relative absence of knowledge regarding differential effects create circumstances that encourage the indiscriminate use of enforced treatment. Caution must be taken not to assume that pressure, *per se*, is useful and effective. Given the ethical concerns that the use of sanctioned pressures create, the need for a typology of coercive measures becomes even more urgent. (p. 516)

and researchers, and from reviews of related literature. Coercive elements suggested by the literature included: "the degree of aversiveness" of the consequence for failure (Stitzer & McCaul, 1987) and the "discomfort level" associated with the consequence by individuals (De Leon, 1988); the immediacy of the response (Tauber, 1993; Anglin, 1988; Weisner, 1990); client contracting (Weinman, 1990), and the clarity and consistency of program rules and their enforcement (Anglin & Hser, 1990b); and the point in case processing when diversion to treatment occurs (Brown et al., 1987). General references to increased surveillance or supervision, often in the form of drug testing, have also frequently been cited as important coercive measures (e.g., Nurco et al., 1995; Calsyn et al., 1994).⁵

The measure of perceived legal pressure used in this research included items that could be grouped in four broad categories or dimensions. One of these was the extent to which the respondent had been given **information** about and understood the conditions of the treatment mandate and how it would be monitored. Questions also addressed the respondents' views that those conditions were closely **monitored**, and could and would be **enforced swiftly**. Finally, questions addressed the respondent's views about the severity of the legal consequences for failing in treatment.

Overview of the Study Design and Research Questions

In lieu of a prison sentence, Brooklyn DTAP provides the option of long-term (generally 15-24 month) treatment in a residential therapeutic community (TC) to repeat, non-violent felony defendants. The charges are dropped if the person completes the program, while those who fail in treatment face prison terms under New York's mandatory sentencing statutes. DTAP participants comprise the experimental sample in this research. The comparison (or control) group in this quasi-experimental design includes a

⁵ As noted earlier, deterrence theory also played a heuristic role in the development of the PLP measure. From the conceptual framework suggested by deterrence theory (e.g., Cook, 1980; Gibbs, 1985; Paternoster, 1987), PLP can be viewed as the extent to which the offender believes that the legally-imposed consequences of not complying with treatment mandates are certain, severe, and swift.

matched sample of clients admitted to the same four treatment sites used by DTAP, but who were referred from other criminal justice sources. Included in this groups are individuals mandated to treatment by courts, probation and parole agencies; about one-third of the group was involved in a TASC (Treatment Alternatives to Street Crimes) program. Combined, these two groups represent a diversity of legally-mandated treatment clients.

Descriptions of DTAP and the mandatory programs represented in the comparison sample, informed by interviews with agency staff, administrators, and study subjects, are provided in Chapter Three of this report. Treatment for all subjects was delivered in one of four long-standing TCs operated by private providers based in New York City. Also described in Chapter Three, the four programs share a very similar, traditional TC approach to treating addiction.

Extensive history, status and program data were collected in interviews with research subjects conducted at admission to treatment and about eight weeks thereafter. Clients' motivation for treatment and their perceptions of legal pressure were also assessed in these interviews. The study's central outcome measure, retention in treatment, was tracked for all subjects for at least six months after admission; those entering the research early in the data collection period were tracked for about 20 months.

The research was designed to test two central hypotheses:

- (1) DTAP participants will stay in treatment for longer periods and show greater retention rates when compared to a matched sample of other legally-mandated clients attending the same treatment programs; and
- (2) Legal coercion, as measured by the Perceived Legal Pressure scale, significantly and independently predicts treatment retention of legally-mandated treatment clients (i.e., of the combined study sample).

A number of supplementary research questions were also explored in the study:

- Do DTAP participants show higher levels of perceived legal pressure than comparison group clients?
- Are there differences within the comparison sample regarding levels of perceived legal pressure (and were these anticipated from operational elements of programs represented in the sample)?
- Are certain aspects of legal pressure (as reflected by individual or grouped PLP items) more or less predictive of retention?
- Can perceived legal pressure be operationalized and reliably measured with the PLP scale, and is there any evidence of its validity?
- How can mandated treatment programs be improved to maximize retention?

Chapter Two:

Study Methodology

Sample

Vera researchers working in the treatment sites recruited eligible individuals approximately a week after their admission to treatment; the researchers followed a strict informed consent protocol and all participation in the research was voluntary. Subjects were paid a stipend of \$20 for participating in each of the two research interviews. All Brooklyn DTAP participants were eligible for participation in the research and three-fourths of those entering the program during the fifteen-month research intake period were recruited and consented to participate. Four DTAP clients chose not to participate in the research; the remainder of those who did not participate were never recruited because of logistical problems in making arrangements for an intake interview.

To be eligible for the comparison sample, newly-admitted clients had to report that they had been told or believed that there would be some legal consequence if s/he did not remain in treatment. Across the sites, approximately one-fourth of those who were initially identified by treatment staff as criminal justice-involved did not meet these criteria. An aggregate matching procedure was then applied to the pool of criminal justice-eligible cases, to ensure that these individuals were similar to the DTAP sample on demographic (age, race/ethnicity, gender) and drug history (primary drug of choice) factors. Of those found eligible and recruited for the comparison group, two individuals chose not to participate. The first section of Appendix A provides additional detail about the sampling process.

The total sample included 86 DTAP experimental subjects and 75 comparison group subjects. Of the 161 study participants, almost three-fourths were drawn from two of the

four treatment sites, North Center and South Center.⁶ The unequal distribution of the samples within the four sites was expected and, given the study's time constraints, unavoidable. Nevertheless, as a means of controlling potential bias due to program differences, several in-treatment program measures were gathered. These measures and any program-specific outcome (retention) differences observed in preliminary analyses were taken into account in multivariate analyses that addressed the study's central hypotheses.

Data Collection

Intake Interview. Intake interviews were conducted, on average, one week after the client's admission to treatment.⁷ The one-to-one interviews, which lasted 1½-2 hours, were conducted by a trained researcher in a private location at the treatment site. The intake interview battery included a mixture of standardized measures and those we developed. Extensive history and status information was gathered on the Addiction Severity Index (ASI; McLellan et al., 1985; McLellan, et al., 1992), a widely-used, standardized measure which assesses individuals' family and social background, employment and education, substance abuse, criminal/legal, medical, and psychiatric status and history. The ASI questions were supplemented with several more detailed items covering employment history and self-reported criminal behavior. Criminal history data were also obtained from official records kept by the New York State Division of Criminal Justice Services.

Additional substance abuse history data were gathered in the interview using the Chemical Use, Abuse and Dependence scale (CUAD), which employs quantity/frequency measures and probes about drug-related life problems. Psychiatric data were collected on

⁶ These are not the real names of these treatment providers. In arranging to conduct the research at the four treatment sites, Vera agreed to use pseudonyms for all four programs in any publicly-released reports on the research.

⁷ Eighty-five percent of the intake interviews were completed within two weeks of admission. Because analyses showed that the mean duration between admission and the interview was significantly greater for comparison cases (\bar{x} = 8.9 days) than DTAP participants (\bar{x} = 6.5), additional tests were done to assess whether this duration variable was related to any of the treatment retention variables in this research. The variables proved to be unrelated.

two standardized measures that have often been used in research on substance abusers, the Symptom Checklist-90-Revised (SCL-90R; Derogatis, 1992) and the Beck Depression Inventory (BDI; Beck & Steer, 1981; Beck et al., 1961). Intake measures of the client's motivation for treatment included the 42-item Circumstances, Motivation, Readiness and Suitability Scale (CMRS), and the Stages of Change Readiness and Treatment Eagerness (SOCRATES) scale (Montgomery et al., 1990; Miller, 1991). Additionally, we created a 14-item measure, referred to below as the Motivational/Program Supplement (M/PS) questionnaire, that addressed other motivational and background factors which prior research has suggested may influence retention (Condelli, 1989; De Leon, 1991).

A Perception of Legal Pressure (PLP) questionnaire, developed by Vera researchers, was also administered in the interview. Shown in Appendix C, the PLP questionnaire used in this research combines a few different response formats, including Likert-type items, rankings, numeric scales, forced choice items, and a few open-ended interview questions.⁸ The questionnaire is designed to be read aloud to the respondent (who is encouraged to read along) and filled out by the interviewer. Responses to the measure were analyzed and scored to create a 40-item summated rating scale.

Two-Month Interview. A second interview focusing on program factors was conducted with all available subjects approximately two months after admission. One hundred and thirty-one individuals, including 75 DTAP participants and 56 in the comparison group, took part in these interviews. Two standardized measures were administered in the interview. The 47-item Community-Oriented Programs Environment Scale (COPEs; Moos, 1988) includes three subscales focusing on staff-client relationships and therapeutic interactions, and program maintenance dimensions such as order, clarity and

⁸ The PLP questionnaire used in this research evolved from pilot tests of individual response items and earlier versions of a questionnaire that were administered to over 200 DTAP participants and clients of other drug treatment programs around New York City. This experience served to underscore the difficulty of creating a reliable and valid measure designed to capture mandated clients' often ambivalent feelings and perceptions about treatment and legal pressure. Based on this pilot testing, we decided that it was premature to construct a formal scale of exclusively Likert-type items for the present research. Instead, the questionnaire is designed to capture a considerable amount of specific, individual-level data while also yielding item scores that can be combined to create a summated rating scale.

control. The Treatment Services Review (TSR; McLellan et al., 1989) is a brief instrument designed by the creators of the ASI that can yield quantitative indicators of the number and types of services received by treatment clients.

Retention in Treatment. Retention results were reported to us from the four TC study sites and from the DTAP office. Treatment status data were recorded as of November 19, 1995, or 180 days after the last study participant was admitted to treatment. While most analyses focused on retention in the first 90 or 180 days after admission (which are the periods when clients are at greatest risk of dropout), retention performance for those who entered the study early in the research intake period were recorded for eighteen or more months after admission.

The great majority of those who left treatment before completion did so on their own (that is, they dropped out or 'split'); at any one site, no more than three study subjects were expelled or discharged for medical, psychiatric, or administrative reasons. Because varying program practices can blur the distinctions between dropouts, expulsions, and administrative, medical, or psychiatric discharges, all analyses focused simply on those in or out at different points in time after admission.⁹

Interviews with Agency and Program Staff

Twenty-nine structured interviews were conducted with line staff and administrators of the primary criminal justice agencies responsible for mandating comparison group subjects.¹⁰ One to three administrators from each agency took part in interviews that addressed practices and policy regarding identification, referral, and monitoring of treatment-mandated offenders under the agency's jurisdiction. Line staff were administered this general interview and a second questionnaire that had several specific

⁹ Study participants were counted as in treatment if they remained in the same TC treatment program they first entered and out if they were not with this same treatment provider. If, as happened in 5-10% of these cases, a client broke a rule and was returned to an earlier treatment phase, or briefly left or was expelled and was accepted back in the program and remained in the TC as of our cutoff date, they were counted as in (and were credited with the entire time in).

¹⁰ No interviews were conducted with DTAP staff or administrators for this study because we were very familiar with the program through previous interviews and reports prepared about the program for the Bureau of Justice Assistance and New York State (BJA, 1994; Young et al., 1995 and earlier years).

queries about the study subject they supervised. Persistent problems in arranging for interviews and reaching appropriate field staff resulted in fewer subject-specific interviews than were originally planned; subject-specific interviews were done with 13 New York City Probation officers, 3 New York State Parole officers and 7 TASC case managers.¹¹

Interviews were also conducted with staff of the four treatment programs to obtain information about their policies and procedures relating to criminal justice clients. Questions addressed how staff identify these clients, report progress to CJ agents, and notify agents when clients abscond or are at risk of failure. Respondents were also asked if and how the different monitoring and enforcement policies of DTAP, TASC, probation, and parole were evident to line staff and participants in the programs, and for their views about the effectiveness of legal pressure on treatment retention. A total of 12 persons were interviewed, three from each program.

¹¹ Our difficulty in reaching criminal justice supervising agents and administrative staff was compounded by the Institutional Review Board's requirement that we wait at least six months before contacting a supervision agent about a study participant (to reduce any risk that the agent would increase supervision or surveillance which could lead to an experiment-induced sanction). This, combined with the delays in getting hold of respondents, often meant they had vague memories about the individual and many were unable or unwilling to search files for documentation about the case. Fortunately, these interviews were intended to yield only supplemental data in this research.

Chapter Three:

DTAP, Mandatory Programs in the Comparison Sample, and Treatment in the Therapeutic Community

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The Drug Treatment Alternative to Prison (DTAP) Program

DTAP was targeted for study for several reasons. Since opening in late 1990, the program has had an exceptional retention record, with 64% of the 538 admitted to the program through May, 1995 staying a year or longer – a rate two to four times the one-year rates typically reported for drug-free residential treatment programs like those used by DTAP (Lewis & Ross, 1994; De Leon, 1991; Condelli, 1994). DTAP's apparent, early success has drawn national attention (Falco, 1992; Bureau of Justice Assistance, 1994) and led to its expansion to other prosecutor offices in New York City (Young et al., 1995).

Most important for purposes of this study, this prosecutor-based program features several unique coercive features that may contribute to retention. DTAP targets defendants with one or more prior non-violent felony convictions who are charged with drug sales; if convicted on the new charge, the defendant is facing a minimum prison sentence of 1½-3 years under New York's mandatory, predicate felony sentencing law.¹² Only defendants charged in a strong "buy and bust" case of sale to an undercover officer are eligible for the program. Additional case screening procedures are employed to ensure that a conviction and a prison sentence are likely in the event of failure (and that the program truly diverts prison-bound defendants). So far, 82% of DTAP failures have

¹² However, some portion of those who fail and are sentenced to prison become eligible to participate in New York's Shock Incarceration program, which features a six-month prison stay and intensive supervision after release. Additionally, beginning in October 1995 (around the time that intake on the present study finished), some sentenced DTAP failures could serve custodial terms of no more than 90 days in a prison-based drug treatment program under a new state sentencing law.

received and are serving prison terms and another 8% are awaiting disposition after entering a felony plea or being indicted for a felony.

A specialized warrant enforcement team assigned to the program performs two functions. Officers in the unit help screen DTAP candidates by investigating information given by the candidate about community ties; candidates are told this information will be used if they abscond.¹³ The enforcement team searches for and apprehends DTAP participants who leave treatment. Records kept by the research unit of the program show that through March, 1996, less than 5% of the DTAP participants who have absconded from treatment remain at large, while 60% have been returned to custody by the DTAP enforcement team and 21% have returned voluntarily (the remaining 14% were returned on an arrest warrant or rearrest).

Additional program elements may contribute in less obvious ways to the participant's sense of coercion and decision to stay in treatment. All candidates must agree to be remanded during the screening process, and they move directly from detention to the residential program. Before going to treatment, DTAP defendants must sign participation agreements in court which specify the length of the program and the legal consequences for failure or success. Defense attorneys and the treatment programs are given information sheets about DTAP and are encouraged to reinforce the same messages about abiding by program rules and the consequences of failure. Candidates are also told they will not be given another program referral – no second chance – if they fail in the first TC to which they are referred. In fact, DTAP only refers cases to another program if the person develops a medical or psychological problem requiring a specialized program.

Written agreements between DTAP and its treatment providers specify protocols for client monitoring and informing the DTAP office about participants who abscond from treatment or who are discharged for rules violations or transferred for specialized medical

¹³ Apart from the case screening and community ties criteria noted above, DTAP sets no additional restrictive criteria for admission. Candidates who meet the case criteria and opt to enter the program are then assessed by staff of the treatment site who are assigned the case based on a rotating schedule. With DTAP candidates, treatment staff use the same standard screening protocols employed for all applicants. To be admitted, individuals must evince a need for and a willingness to enter treatment, and none of the providers will admit persons with chronic, disabling medical or psychiatric histories.

or psychiatric care.¹⁴ All DTAP treatment sites provide monthly progress reports on each participant; these go to the DTAP office, the presiding judge, and to any probation or parole agent involved in the case. Provider staff call the DTAP office immediately if a participant leaves or is discharged from the program, and the client is encouraged to call the office and his or her defense attorney if they are considering leaving the program. DTAP staff will talk to the individual and treatment staff by phone to encourage the client to stay and remind them of the client's legal jeopardy. With more recent cases, DTAP has begun to arrange special court appearances and judicial admonishments for at-risk participants.

One aspect of DTAP deserves mention because some have speculated that it makes the program *less* coercive than some treatment diversion programs. Some observers have argued that DTAP's deferred prosecution approach, where drug charges are held pending the defendant's outcome in treatment, are less coercive than deferred sentencing models where a guilty plea is obtained prior to entering treatment.

It should also be noted that, apart from the legal sanctions faced by those who fail in treatment, DTAP emphasizes the rewards gained from completing the program. In addition to dismissing the felony arrest charges that triggered the DTAP admission, these include specialized vocational and housing assistance provided to all graduates. While not the focus of this study, perceptions about the importance of these awards are being assessed in other, ongoing research on the DTAP program.

¹⁴ Over the past three to four years, DTAP, TASC, and other criminal justice programs have become increasingly prominent partners with treatment providers in New York, and, perhaps because of this, counselors and other staff appear more aware of all clients' criminal justice status and more cautious about discharging clients facing lengthy jail or prison terms.

Mandatory Treatment in the Comparison Group

Eighty-five percent of the 75 comparison subjects were attending treatment under the supervision of New York State Parole (20 individuals), New York City Probation (21), or the local TASC agency (23).¹⁵ While this last group was considered to be primarily the responsibility of TASC, about half the group came to TASC as probation or (in just two incidences) parole cases. Of the remaining 11 persons in the comparison sample, six were mandated directly by a court, two were parolees in the federal system, one was a federal probationer, one was referred as a part of a mandate to attend a local community corrections program, and one was on probation from a county north of New York City in the Hudson Valley.

With the study's focus on mandated clients' subjective views of legal pressure, an extensive, empirically-based accounting of how the agencies and courts represented in the comparison sample approach and perform mandated treatment was beyond the scope of this research. Instead, we provide here a summary description of the three main agencies' efforts to mandate persons under their supervision to substance abuse treatment (particularly to residential TCs), based on observations and ongoing discussions held over the course of the research, and on interviews done with Probation, Parole, and TASC staff and administrators, and with personnel and clients in the treatment sites.

The efforts of all three agencies reflect the rapid changes that have undergone compulsory treatment in New York over the past six or seven years – changes that arose in response to the crack epidemic of the mid- and late 1980s. TASC in New York expanded greatly during this time, and around 1990, both Probation and Parole launched ambitious programs targeted at probationers and parolees with substance abuse problems. At this point, these programs are institutionalized in these agencies and they represent, along with DTAP and TASC, the four major sources of criminal justice referrals to drug-free residential treatment programs in New York City.

¹⁵ Probationers and parolees, along with TASC and DTAP clients in recent years, account for the bulk of mandated treatment referrals in New York City, and the distribution of criminal justice referral sources in the comparison sample appears to be representative of the four TCs' criminal justice clientele, with one notable exception. Relative to their numbers in the treatment sites, parolees are over-represented in the present sample, probably because the comparison group selection process required over-sampling older heroin users.

NYC Probation and NYS Parole. The New York City Probation program has been described in detail elsewhere (Falkin, 1993), as has the beginnings of New York State Parole's ACCESS program (Young et al., 1991). The programs differ in substantial ways from TASC, and they will be discussed first. Both agencies' programs revolve around an internal, specialized unit designed for assessment, case referral, and monitoring in community-based treatment programs; in Probation, this unit is known as the CPU (Central Placement Unit) and at Parole, the unit is named ACCESS. Central to the efforts of both agencies is contracting with private, community-based providers for the purchase of treatment slots designated specifically for referrals from the CPU, ACCESS, and from field officers. Over the course of this study, Parole had contracts with 12 to 14 providers, for between 840 and 1217 treatment slots. The CPU had contracts with 10 providers for 930 slots. Agency contracts with providers permit immediate access to any unoccupied, contracted slot, and obligate treatment staff to provide monthly progress reports and status information on all probation or parole clients referred to them for treatment. Lines of communication are established between liaisons designated at both the treatment site and within CPU and Access to monitor and discuss individual clients and issues that arise in treatment.

Important for this research, however, *both programs are heavily focused on treatment in outpatient and day treatment modalities and none of the slots currently purchased by either agency are for long-term residential beds in TCs, thus excluding subjects participating in this study.* Interviews with probation and parole administrators confirmed that referrals to 18-month residential programs are a rarity, accounting for probably less than 10 or 15% of mandated treatment in these agencies.¹⁶

The fact that no formal agreements exist between these agencies and the providers for TC beds means that referral and monitoring involving these cases are the responsibility of the field probation or parole officer and not the CPU or Access. There is no formal monthly reporting mechanism regarding these cases, although administrators at

¹⁶ However, several of the probation officers and two of the three parole officers interviewed for this research gave higher estimates for the number of residential clients on their caseload, suggesting that, compared to most field officers, those supervising study subjects may be predisposed to residential options and perhaps more familiar with the TCs involved in this research

the treatment sites indicated to us that this process is largely institutionalized, and at two of the sites, specialized legal departments coordinate reporting on all criminal justice clients. There is no designated liaison at Probation or Parole, and all communication on these clients must occur between the individual officer and treatment staff.

The name and office location of the field officer supervising (and usually referring) the mandated client is typically first recorded by treatment staff at admission. Officers in both Probation and Parole said that they routinely received progress reports, often monthly and at least quarterly.¹⁷ Occasional visits to the treatment site, monthly or quarterly phone calls initiated by the field officer or treatment program, and/or an occasional court or office appearance by the parolee were described as routine by the three parole staff we interviewed. These additional monitoring contacts are apparently less common among Probation staff, who have caseloads that are typically at least twice the size of Parole caseloads.¹⁸

In interviews, probation and parole (and TASC) officers showed no particular pattern of differences regarding the use of urinalyses as a monitoring device. No supervising agents routinely took urine samples from individuals who were in residential treatment, and they reported varying policies regarding urinalysis by the TCs. Most field officers said that they received periodic urinalyses reports from treatment providers, and said they would be informed through regular progress reports if a positive urine was found on an individual they supervised.

Compared to DTAP and TASC, Probation's monitoring and responsiveness is perhaps weakest when it comes to dealing with clients who are at risk of failing, or actually leave residential treatment. Our interviews and observations indicated that getting hold of field officers by phone can be an unreliable and sometimes frustrating

¹⁷ Through informal arrangements, the CPU liaison in Probation occasionally receives monthly reports on residential clients in two of the programs studied here, which have contracts with Probation for some of their outpatient slots.

¹⁸ Some of the many reasons that caseload comparisons are imprecise include: individual probationers and parolees in the research could be assigned to standard supervision or to any number of specialized supervision caseloads of differing sizes and with varying reporting requirements; probation field officers sometimes handle multiple caseloads of differing size; officers in both agencies have discretion in modifying the reporting requirements of individuals within a general supervision category; and both agencies are periodically reassessing and modifying their supervision structures.

experience. Letters or faxes to the officer are sometimes necessary. There was also little mention in our interviews of arrangements between probation and treatment staff to identify individuals at risk of failure, or to work out individualized, intermediate responses in these cases (such as requiring the person to appear at a field site or in court for an admonishment or warning). (Treatment staff interviews and our own observations suggest these statements may also apply to parole officers, but so few interviews were done with parole officers that we cannot make any assertions about this group.)

Both Probation and Parole issue warrants on individuals who fail treatment and abscond from supervision. Respondents from both agencies indicated varying durations before a warrant might be filed, although probation officers generally described a longer delay between notification of failure and warrant issuance than the few parole officers we interviewed. Due to limited resources and capacity, Probation (along with TASC, which had no independent apprehension capacity at the time of this research) appears less able to search for and apprehend treatment absconders. Parole caseloads permit officers to devote more time to this area of enforcement. Both agencies have warrant squads, although most of the probation officers we interviewed agreed that substance abusers with no history of violence who abscond from treatment programs are not targeted priorities of their unit or the police. In part, this reflects the consensus belief that treatment absconders quickly "pick up" and return to drug use and related crime, and inevitably return to the system in rapid order on a rearrest.

Legal Circumstances and Mandates of Probationers and Parolees. For those who fail in treatment and return to custody, carrying out any threatened legal consequence is foremost a function of the individual's legal circumstances, although field officers, their immediate supervisors, and the courts continue to exercise considerable discretion in enforcement. In contrast to DTAP and to some degree TASC cases, probationers and parolees in this research came to treatment with a great diversity of legal circumstances.

The most common incident that triggered the treatment admission among probationers was a new drug arrest while the individual was on probation from a prior case. For parolees, the triggering event was typically an arrest for violating conditions of supervision. In many of these cases, the individual had been held in jail or prison for

several months while undergoing the parole violation and revocation process, after which they were restored to supervision with the condition of attending treatment. A few parolees with new arrests for petty offenses and many probation cases were mandated to treatment by the supervising officer with the threat of a violation, for reporting lapses, repeated positive drug urines, or failure in outpatient or day drug treatment. Some parolees in the study also reported that they had chosen to attend residential treatment, after relapses and repeated failures in less structured treatment. Probation cases with no prior probation status sometimes entered treatment under a court mandate as an “investigation” case prior to sentencing, while the majority of these cases were mandated in concert with sentencing.

As expected, probation officers responding to our interview generally described less serious legal consequences for treatment failure than parole (or TASC) respondents, usually amounting to a year or less in jail. Most probation officers said they tried to work with their supervisees and would typically give them another opportunity at treatment, particularly if the individual voluntarily returned to custody and expressed interest in trying again at treatment. While our data from parole officers were too incomplete to suggest a pattern of response to failed cases, the principle of graduated sanctions, in the form of more stringent supervision, reporting and urine requirements and a more intensive level of care, was noted by one of the three respondents and the parole supervisor. For the most part, however, residential treatment is the last step in this process, and parolees who fail at this point may face more serious, custodial responses upon failure.

TASC Clients and Case Management. TASC differs in substantial ways from the approach taken by Probation and Parole to mandated treatment. In some respects TASC in New York City is more similar to DTAP than it is to these other agencies. A little more than half of the TASC cases in this research were predicate felony drug cases – that is, like all DTAP’s cases, these are individuals arrested on a new felony drug charge who have one or more prior nonviolent felony convictions and they are often still on probation (or occasionally parole) from the prior conviction. Unlike DTAP, these are not exclusively “buy and bust” cases, and they are much more likely to enter treatment

several months after arrest, nearly always under a deferred sentencing arrangement after a felony plea is reached in Supreme Court. An estimated one-fourth of the TASC cases are residing in the community and are not detained pending treatment referral or case disposition, and about the same proportion in our research were misdemeanor cases. Compared to DTAP, TASC cases with felony histories are more likely to have multiple prior convictions, although, like DTAP, they do not have prior violent felony convictions.¹⁹

With some important exceptions, then, TASC cases in this research resemble DTAP cases in presenting considerable coercive opportunities, with the threat of mandatory prison terms. TASC administrators prefer the deferred sentencing arrangement and believe this is potentially more coercive than DTAP's deferred prosecution approach. On the other hand, with the one in every fourth client who is not detained pre-trial (and/or coerced to treatment on a misdemeanor), TASC may be at a disadvantage trying to impose coercive strategies on individuals who have spent several months in the community on pre-trial release.

Perhaps in part to compensate for this, TASC appears to place greater emphasis than the other agencies on making certain that their clients are motivated for treatment, and once in treatment, TASC case managers emphasize mixing explicitly coercive messages with ones of support for their clients. A TASC director said he often tests the resolve of prospective clients by advising them to "take the sentence and you can be out in six months" by opting for a shock incarceration program instead of treatment. Staff are encouraged to have clients repeat verbally the consequences they face for failure, to the point of adding potential prison time to their current age, and thinking about what it would be like to return to the community and their families at that age, after years being absent.

Both to respond to the high level of their treatment need and to match the legal jeopardy facing predicate felons, TASC relies on long-term residential TCs for about two-

¹⁹ The description of TASC given here applies specifically to the TASC clients in our research, and generally to this agency's predicate offender program that operates primarily in Brooklyn and (with smaller numbers) in Queens. TASC also works with sizable numbers of misdemeanor cases, and refers and manages hundreds of cases annually in outpatient modalities, particularly in Staten Island.

thirds of their clients. TASC has established relationships with many TCs around the city, including the four sites participating in this research. A TASC case manager serves as the liaison to each TC; case managers report that they receive written monthly reports and are in frequent phone contact with staff and, when necessary, TASC clients at the treatment sites. The case manager visits the nearby sites monthly and those located upstate every two or three months to meet with clients and staff, assess progress, respond to problems or concerns, and rekindle messages of support and legal threats. TASC also encourages judges presiding on cases to require frequent reappearances in court to assess progress and reinforce messages, especially during the first six months or so of treatment. The case managers encourage treatment staff and judges to work with them to respond to individuals who appear at risk of failing, and use admonishments and sometimes short "reminder" stays at Rikers for at-risk clients before returning the person back to treatment. While TASC has no detailed or explicit policy of employing graduated sanctions with participants, of the four programs represented in this research, they come closest to this approach.

As is the case with DTAP, the case manager/TC liaison can be reached immediately if the client leaves treatment. TASC strongly encourages failed clients to return to them voluntarily, and data Vera collected in an earlier research project indicates that a substantial number, about half of all failures, do so (Young et al., 1995). If the person does not return immediately, TASC requests a warrant from the court. However, until very recently (and throughout the course of this research), *TASC had no apprehension capacity*. TASC relied entirely upon standard police and probation enforcement squads (which generally do not regard non-violent drug offenders as a priority) to return absconders.

Based on reports from subjects, TASC threatens cases who are failing in the program with a prison term of similar length to other study subjects (about two and a half years); however TASC case managers generally cited relatively long prison terms (in many cases four and a half year minimum sentences) as the standard threat. No doubt echoing the tough messages they give to clients, TASC case managers also told us in interviews that they were not likely to be lenient with failed cases. Nonetheless, in the same Vera

research cited above, nearly half (46%) of all TASC clients who did not complete treatment in the first TC to which they were referred received a referral to a second treatment program – a rate higher than any of the other programs assessed in this earlier research, and significantly at variance with Brooklyn DTAP's 3% re-referral rate.

TASC, then, presents a curious mix: Tight monitoring and tough criminal justice-oriented messages, with supportive, clinically-oriented responses to lapses and failures in treatment. The emphasis on monitoring and tough messages may be especially effective in heightening perceived coercion early in a client's stay. Unfortunately, time constraints in prevented us from assessing in this research whether TASC clients' perceptions change over time, and whether, after several months in treatment, clients begin to make distinctions between threats and actual enforcement responses. Notably, none of the treatment staff we interviewed commented on the apparent discrepancy in TASC's approach. In fact, as noted below, treatment staff generally made few distinctions among criminal justice clients and tended to group TASC and DTAP together as similarly responsive, model programs. In this sense, DTAP's relatively strict enforcement policies and practices may serve to enhance TASC's credibility in the area of enforcement.

Treatment in the Residential Therapeutic Communities

The four TCs in this research are all operated by large, well-established non-profit agencies which administer several drug treatment modalities. Three of the four each admit well over 500 clients to their adult residential programs annually, while the fourth admits about 200.

Estimates of the proportion of criminal-justice referred clients admitted to residential treatment by these providers were similar, ranging from just under one-quarter of all clients at South Center to about one-third at the North and West programs. While not formally referred by criminal justice sources, an additional 10-15% of admissions were identified by provider staff as having some criminal justice involvement. DTAP, TASC and New York City Probation accounted for the bulk of criminal justice (CJ) referrals to each of these sites; in aggregate, referrals from these sources comprised from 65% of the total CJ admissions at South Center to 98% at East Center.

Demographic information on admissions provided by the programs showed similar client profiles. The mean age of adult admissions to all the programs was just above 30 years. Men accounted for approximately three-fourths of all residential admissions and Blacks represented the largest racial/ethnic group, accounting for about 40% of the admissions. (Appendix B includes more extensive information reported by provider staff on background and drug history of adult residential clients, along with a detailed breakdown of proportions admitted from different criminal justice sources. Also included in Appendix B is a general summary of the therapeutic community modality, and its philosophy and structure.) Taken largely from interviews with treatment staff, the following discussion focuses on how the four treatment providers handle referrals from the criminal justice agencies represented in this research.

At admission, intake staff at the treatment sites query all clients about their legal status or involvement with the criminal justice system. DTAP and TASC clients arrive at the programs with documentation identifying them as such, prepared by DTAP and TASC staff. The DTAP documents include the client's signed participation agreement and TASC provides a letter which describes the person's court status. Clients who are on (probation or parole) generally do not arrive with any written documentation, but self-report their status and the name and location of their supervising officer. Treatment staff then contact the officer to verify identification and legal status, and the officer is required to send an official letter on department stationary indicating that the person is currently on probation or parole and has been referred to treatment.

At treatment intake, all criminal justice clients must sign a consent form in which they agree to allow treatment staff to communicate with the CJ agent while the person is in treatment. All documents related to legal status are placed in the client's clinical folder at intake. The North and West programs have a separate legal folder for CJ clients that includes the name and phone number of the CJ agent, future court dates and any agreements or special information from the CJ program or agent. The clinical and legal folders follow the client through treatment and are accessible to administrators, counselors and other clinical staff.

For the most part, the information conveyed to CJ clients during the orientation period is the same as that given to non-CJ clients. CJ clients are informed that the CJ agent or program will be notified within 24 hours if they abscond and that the consequences of failure are potentially more severe for them because of their legal status. None of the programs prepare any special written materials or instructions for CJ clients about policies or practices relating to monitoring or enforcement. DTAP, however, provides the TCs with copies of the DTAP participation agreement and an information sheet which advises DTAP participants to call their defense attorney if problems arise in treatment and reiterates the program's policy to apprehend and prosecute failures. Staff are required under DTAP's agreement with the providers to give copies of these documents to DTAP participants.

Clients are transferred to other facilities for the main and re-entry treatment phases. All four providers send most clients to facilities outside of the New York City area for main treatment. Upon arrival, staff identify CJ clients from documents in the clinical and legal folders. The North and South programs have specialized legal departments in their facilities which maintain lists of CJ clients, coordinate information for progress reports, check for active warrants and inform CJ agents when clients fail. None of the TCs has policies requiring staff to discuss legal status or consequences of failure during the main treatment or re-entry phases. In fact, those interviewed noted that administrative and clinical staff generally do not know the specific legal consequence clients face since this information is not in the clinical or legal folders. Caseload counselors usually learn about specific consequences from their clients and may remind them of these consequences when they violate program rules. The general perception is that DTAP and TASC clients are more likely to be facing prison sentences if they fail in the program than those on probation or parole.

Treatment staff reported that monthly progress reports are typically prepared by the client's primary counselor with input from other treatment staff who work with the client (e.g. vocational or educational counselors). Varying slightly from program to program, the reports provide ratings and/or narrative on topics ranging from the client's attitude and motivation, to services received in the past 30 days. The form used by East Center

specifies urinalysis results, while the other sites' forms include a comments section for reporting these results. At the East and West programs, progress reports are sent by counselors to the CJ agent identified in the clinical folder. A special projects unit within the North program distributes their reports. At South Center, reports on DTAP go through a special liaison, while those going to TASC, probation, or parole officers are sent directly by the case counselor. As noted above, treatment staff frequently cited problems informing probation and parole officers about clients, especially when the client is assigned to a new officer after entering treatment.

Calls to CJ agents about clients who are having disciplinary problems or are at risk of dropout or expulsion are usually made by designated administrative or legal staff at the treatment site, in consultation with the case counselor. Treatment staff may have the client speak directly to the CJ agent or ask the agent to visit the client at the treatment facility. These calls are much more likely to be made on DTAP and TASC clients; liaisons in these agencies are well known by treatment staff and appear to have a developed working relationship with staff at all the programs.

If a CJ-mandated client leaves the program or is expelled, the policy at the four programs is to notify the designated CJ agent by phone within 24 hours. CJ agents are also sent an official discharge letter which has the date, time and reason(s) for termination. Clients expelled from facilities located outside of New York City are given bus fare and escorted to the nearest bus depot by staff. Some upstate facilities have an agreement with TASC to transport Queens TASC and DTAP clients to the TASC office in Queens. CJ clients who drop out or who are expelled from treatment may be readmitted on a case-by-case basis, with the approval of the supervising criminal justice agent. Actual numbers of readmitted cases were not available, however program staff estimated this occurred with less than 10% of the dropouts. Some staff reported that readmission was more likely to occur with comparison clients than DTAP participants, while others said there was no consideration of CJ status in making a decision to readmit.

Chapter Four: Results

Descriptive Findings

Description and Equivalence of the Study Samples. Table 4A on the next page presents background data collected from the ASI and other measures used in the intake and two-month interview for all subjects and separately for the DTAP and comparison group participants. (Additional descriptive data on the sample is presented in Table A1 in Appendix A.) The data reflect the DTAP profile described earlier: a male Latino heroin abuser, around 31 years of age, without a high school diploma and with a poor work history. Just under three-fourths of the sample used heroin or cocaine daily or almost daily in the month before admission. Heroin users (N=111) averaged 9.9 years of regular use and crack users (N=92) averaged 6.1 years of regular use (subjects could report using both drugs regularly at some time in their life).

About one-fourth of the sample complained of chronic medical problems and a similar number were identified as severely depressed on the Beck Depression Inventory. Roughly the same proportions self-reported emotional or psychological problems on the ASI, such as serious anxiety, depression or suicidal ideation. Study subjects averaged just over seven prior arrests, including two felony drug arrests and one felony drug conviction; about one fourth had served a state prison sentence.

Other than anticipated differences in drug and criminal history, the two study groups were quite similar, indicating that the selection and matching process was successful. Shown in the last section of the table, the two groups showed no differences on any of the motivational scales or measures of the quantity and type of treatment services received (the TSR) and of program staff and environment (COPES).

Results in the table show the greater prevalence of crack use in the comparison group, while significantly more DTAP clients report primary problems with heroin.

Table 4A: Descriptive Information on the Study Samples

Variable Description	DTAP (N=86)	Comparison (N=75)	All Subjects (N=161)
Age (\bar{X})	31.5	31.0	31.3 (sd=6.7)
% Male	91.9	88.0	90.1
% Hispanic	62.8	60.0	61.5
% Black	34.9	33.3	34.2
% White	2.3	6.7	4.4
Highest grade completed (\bar{X})	10.4	10.7	10.5 (1.8)
% Unemployed in month before admission	74.7	67.4	70.8
% Bothered by chronic medical problem(s)	27.9	17.3	23.0
% Severely depressed (from Beck Dep. Inv.)	27.9	28.4	28.1
% Experienced emotional, physical or sexual abuse, lifetime	17.4	25.3	21.1
% Using heroin or cocaine daily in past 30 days	76.7	68.0	72.7
% Reports heroin primary problem drug*	58.1	40.0	49.7
% Reports crack cocaine primary drug**	18.6	38.7	28.0
% IV drug use, lifetime	18.6	10.7	14.9
Prior admissions to drug treatment (\bar{X})*	1.2	1.9	1.5 (2.1)
% Prior admission to a TC program *	9.3	28.0	18.0
Prior arrests (\bar{X})	7.1	7.1	7.1 (5.5)
Felony arrests (\bar{X})	3.6	3.6	3.6 (2.5)
Felony drug arrests (\bar{X}) **	2.4	1.7	2.1 (1.3)
% Violent felony arrest*	24.4	41.3	32.3
% Prior prison sentence	24.4	33.3	28.6
% Sold drugs frequently in past year**	83.5	48.0	66.9
% Ever committed robbery	22.6	30.7	26.4
ASI legal problems composite score (\bar{X})**	0.73	0.62	0.68 (0.22)
Circumstances, Motivations, Readiness and Suitability Scale score (\bar{X})	10.0	10.4	10.2 (3.2)
Client/Peer support score (P/MS measure, \bar{X})	7.7	7.7	7.7 (1.5)
Staff involvement (P/MS measure, \bar{X})	8.0	8.0	8.0 (1.4)
Relationship Subscale (COPEs scale, \bar{X})	20.6	19.8	20.3 (4.2)
Personal Growth & Goal Orient. (COPEs, \bar{X})	27.3	27.4	27.4 (4.2)
System Maintenance and Change (COPEs, \bar{X})	22.0	21.6	21.9 (2.4)
Sessions with clinical or service professionals, past week (TSR questionnaire \bar{X})	8.2	6.9	7.7 (6.7)

*p<.05; **p<.01

One somewhat unexpected difference observed between the groups concerned the comparison sample's greater prior involvement in drug treatment and TC programs in particular. One interpretation of this is that DTAP is engaging individuals in treatment who would ordinarily not enter these programs. More comparison clients, in contrast, have tried treatment previously, and some show repeat admissions to treatment. DTAP participants were clearly more involved in drug sales than comparison clients based on both self-report and official criminal history data. Indicative of DTAP's policy of excluding defendants with violent histories, comparison client records were much more likely to include an arrest for a violent crime, and they were somewhat more likely to have served state prison time. Variables that showed group differences were controlled statistically in later multivariate analyses of group effects on retention outcomes.

PLP Results

Item Analysis and Scale Reliability. Responses on the PLP instrument were scored to yield 40 discrete items which were then summed to yield a total PLP score. A preliminary item analysis of this 40-item scale was performed on the entire study sample (N=161). Eleven of the items had low item-total correlations (<.20). Six of these were dropped after the 11 were examined for content and their correlation with retention (as an indicator of predictive validity). Although the five retained items shared little variance with other items in the scale, each measured important aspects of coercion (e.g., the perceived length of time to apprehension if the respondent absconded) that were not addressed by other items and/or was predictive of retention.

The PLP questionnaire is shown in Appendix C. Table 4F, at the end of this chapter, lists several of the items included in the final 34-point scale. As shown in the table, most item scores range from 0 to 4. When summed, total PLP scores for the sample ranged from 48 to 105 with a mean (\bar{X} =75.6) near the midpoint of a distribution that approached normality (sd=10.8). Analysis of the final 34-item scale showed the

PLP to have good reliability for a new scale that employs various response formats, with an internal consistency coefficient (Cronbach's α) of .75 and a standardized item α of .78.

Assessing Validity of the PLP Measure. Although this study was not intended as a formal test of the PLP measure's validity, it was possible to begin to explore this issue through some statistical tests of available data. First, factor analyses, which test whether responses to items that were intended to be of similar content correlated with one another, or "clumped together," did not show the expected (or any apparent) pattern. Specifically, an initial principal components analysis yielded 12 factors that accounted for 66% of the variance among the 34 items, and a forced four-factor solution could account for only one-third of the scale's variance. The four categories of PLP described in Chapter One – information, monitoring, enforcement, and severity – did not emerge as distinct dimensions. At minimum, this means that it would be inappropriate to sum items meant to reflect these areas to create subscales; at worse, this could be interpreted to mean that respondents do not understand items as they were intended, or their responses are biased or untruthful.

Another set of analyses looked at bivariate relationships as indicators of the validity of the *overall* PLP scale. Correlations between overall PLP score and the few interview items that most directly reflect self-perceptions of legal pressure showed support for the scale's concurrent validity. As shown in Table 4B on the following page, the CMRS item, "I am sure I would go to jail if I didn't come here to treatment" had the highest correlation ($r = .42$) with PLP of all interview items and scales that were examined.²⁰ At $r = .22$, the relationship between overall PLP and total CMRS is positive and significant, but small, suggesting they are not redundant measures (an indicator of divergent validity).

²⁰ As discussed below, the group variable (DTAP vs. comparison group) was, as expected, significantly related to the total PLP score. To clarify the relationships assessed in this section, the grouping variable is partialled from this correlation (between PLP and the CMRS item) and all those shown in Table 4B.

**Table 4B: Selected Correlations of Interview Items and Scales
with Overall PLP Score (N=161)**

Variable Description	Correlation (r) with PLP Score ¹
CMRS item: "I am sure I would go to jail if I didn't come to treatment."	.42**
ASI item: "How serious do you feel your present legal problems are?"	.18*
ASI legal problems composite score	.27**
Total CMRS score	.22**
CMRS Circumstances Subscale	.17*
System Maintenance Subscale (COPEs)	.22*
Staff Involvement (M/PS)	.24*
Peer/Other Residents Support (M/PS)	.17*

Note: Higher PLP scores denote greater perceived coercion. All correlations shown are partial correlations with the group variable (DTAP or comparison group) statistically controlled. Due to missing values, the sample size on a few of the tests ranged from 153-160.

*p<.05; **p<.01

Notably, the Circumstances subscale, which addresses perceptions of life circumstances and pressures that might affect treatment attendance, was the only one of four CMRS measures that had any kind of significant association with PLP. Virtually the same pattern emerged in analyses of the COPEs and M/PS measures, where a significant, positive relationship was observed between overall PLP and subscales from each of these measures that reflect views of program environment and staff that echo some of the information, monitoring, and enforcement items in the PLP.²¹ These findings are more notable for their consistency than magnitude (while statistically

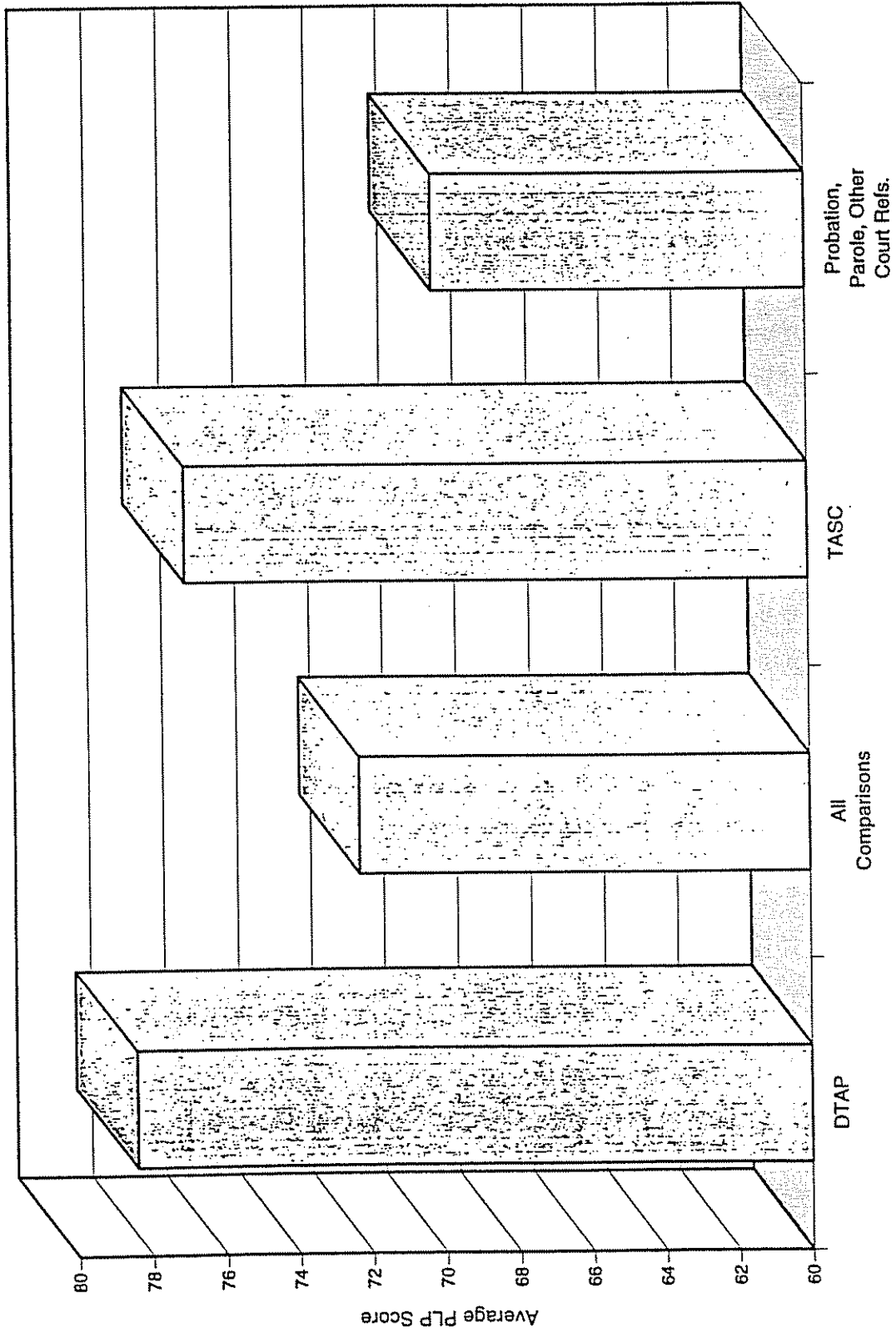
²¹ The COPEs "System Maintenance and Change" subscale that is correlated with PLP is described in the COPEs manual (Moos, 1988) as addressing the respondent's view of (a) the explicitness of program rules and procedures, (b) the extent to which the staff uses measures to keep program clients under necessary controls, and (c) how important order and organization are in the program. Significant positive correlations were observed between the PLP and items from the M/PS measure that reflect the view that staff and clients are involved and proactive in responding to failure. No other COPEs, P/MS or CMRS subscales were associated with PLP.

significant, the correlations are small at around .2). PLP was unrelated to any subscales from these measures that had no face validity as indicators of perceived legal pressure.

Predictive and “known groups” validity (Nunnally, 1978; Spector, 1992) are two other important ways to assess scale validity. As illustrated in Figure 4A on the following page, DTAP participants scored higher than comparison subjects on total PLP scores, showing the group difference in the expected direction. With DTAP participants averaging 78.5 (sd=11.2) and comparison clients 72.3 (sd=9.6), this difference was evident in a bivariate test ($t=3.75$, $p<.001$) and upheld in a logistic regression, where other factors related to group membership (noted in Table 4A) were controlled statistically. Other bars in Figure 4A show that PLP scores conformed to the pattern expected, with TASC clients scoring near DTAP participants and other comparison subjects showing lower PLP scores.

Findings indicating that overall PLP scores were associated with retention would offer further support of the predictive validity of the measure. These analyses are presented in the next section, which addresses the central hypotheses of the study.

Figure 4A: PLP Scores for Different Study Groups



Retention in Treatment

Both the central hypotheses of this study focused on treatment retention as the critical outcome:

- (1) DTAP participants will stay in treatment for longer periods and show greater retention rates when compared to a matched sample of other legally-mandated clients attending the same treatment programs; and
- (2) Legal coercion, as measured by the Perceived Legal Pressure scale, significantly and independently predicts treatment retention of legally-mandated treatment clients (i.e., of the combined study sample).

In this section, results of bivariate analyses that addressed these hypotheses are discussed, followed by multivariate test results.

Bivariate results. Initial analyses showed the DTAP group staying in treatment at somewhat higher rates at 90 days and significantly higher rates at 180 days after admission (chi-square= 4.62, $p < .05$). However, further inspection of retention at each of the four TC sites suggested that the DTAP-comparison difference was largely attributable to especially low retention for the latter group at one site (North Center). As illustrated in the 90-day figures shown in Table 4C, retention for both groups at the other sites was remarkably consistent and quite high, with rates ranging just a few percentage points around 88% for both groups at the three sites. DTAP participants also had a 85% retention rate at North, while just 57% of the comparison group remained in treatment at this site at the three-month point.²²

Discussed further below, no conclusive explanation for the comparison sample's retention performance at the North site emerged from interviews or the quantitative data. In any event, since TC differences were isolated to this one program, a North program dummy variable was created (North clients = 1, all others = 0) and included in

²² The figures at 180 days varied little from this pattern, with attrition at 54% for comparison clients at North, compared to a DTAP attrition rate of 22% at this site, and rates of 12-23% for either group at the other TCs.

all subsequent multivariate analyses that examined whether there was a unique effect for DTAP participation independent of attending North Center.

Table 4C: Retention at 90 Days by Study Group and TC

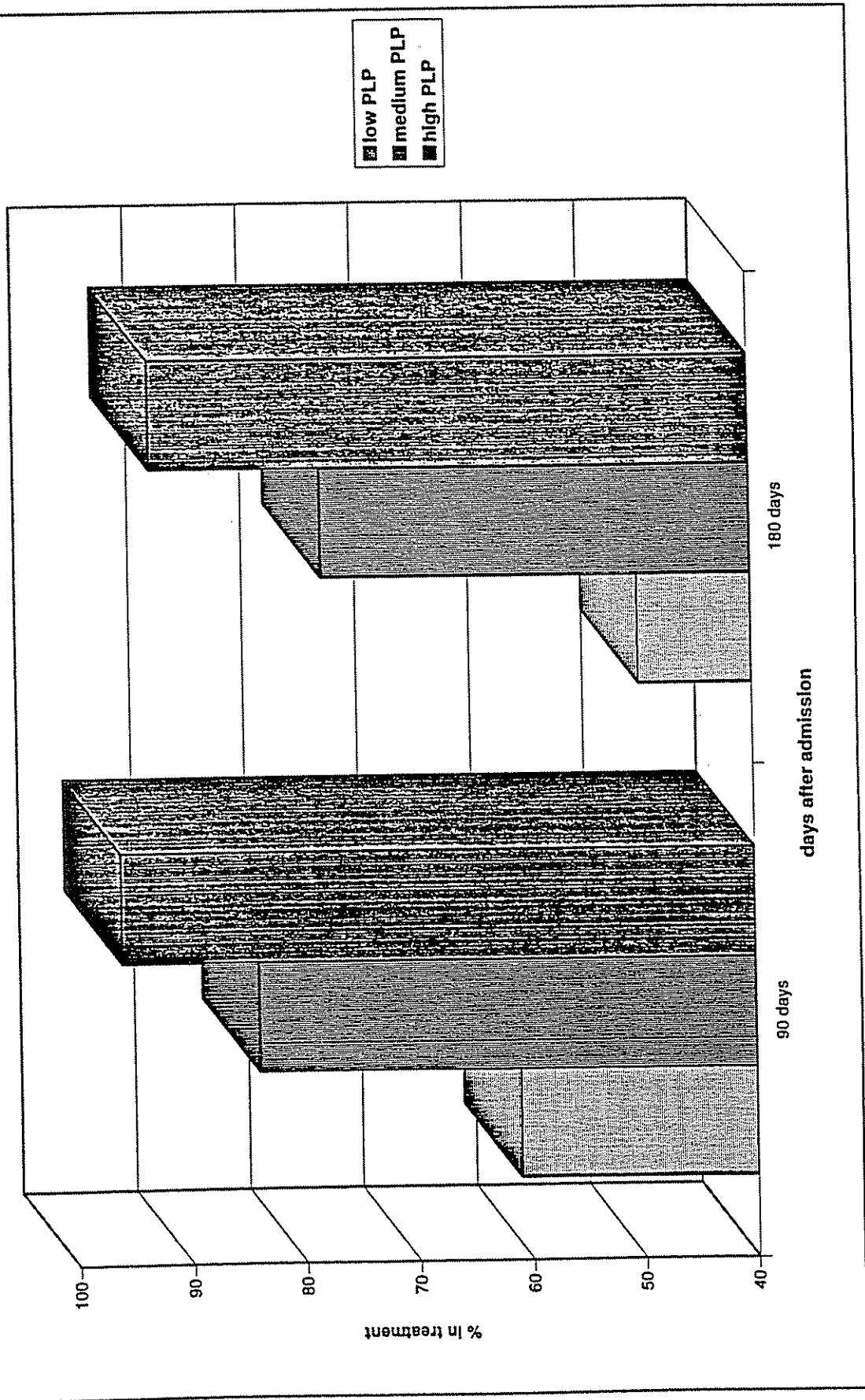
TC Program	DTAP Participants			Comparison Group		
	Admitted N	Retained at 90 days N	Percent	Admitted N	Retained at 90 days N	Percent
North Center	27	23	85.2%	28	16	57.1%
South Center	36	31	86.1	26	23	88.5
East Center	18	16	88.9	8	7	87.5
West Center	5	4	80	13	12	92.3

Our second hypothesis was confirmed by bivariate analyses which showed that those with high PLP scores had higher retention rates. To ease interpretation of the PLP analyses, a categorical version of the total PLP score was created to distinguish persons scoring low, medium, and high on the measure.²³ Figure 4B displays the substantial differences in retention rates for these three groups at 90 days and 180 days after admission to TC treatment. A number of bivariate statistical tests showed the relationship between PLP and retention to be statistically significant.²⁴

²³ Individuals who scored one standard deviation below the overall sample mean were coded as "low" (scores in this group ranged from 48-64, N=28), those scoring more than one standard deviation above the mean were considered "high" (87-105, N=29), and those in between were designated as having "medium" PLP scores (65-86, N=104).

²⁴ The three-level categorical coding of PLP is associated with retention at 90 days ($\chi^2 = 12.9$, $df=2$, $p<.01$) and 180 days ($\chi^2 = 15.1$, $df=2$, $p<.001$). The zero-order correlation of the continuous, unrecoded PLP and days in treatment up to 180 days is .30 ($p<.001$). Table 3C shows the correlations of the continuous PLP measure with retention at 90 and 180 days.

Figure 4B: Retention Rates by PLP Scores



Survival curves, which depict the approximate proportions still in treatment from the date of admission through one-year post-admission are shown in Figures 4C and 4D.²⁵ The one-year survival curve for the entire sample, in Figure 4C, shows the characteristically steep decline in attendance during the first 10-12 weeks of treatment and then some leveling off.²⁶ Differences in the cumulative retention rates of the groups of subjects scoring high, medium, and low on the PLP are evident in Figure 4D. When plotted using all available data (up to 82 weeks for the earliest study entrants), subjects with low PLP scores had an average survival time of 37.8 weeks, compared to 60 weeks for the medium group and 74.4 weeks for those scoring high on the measure. Statistical tests comparing the survival curves of the three groups followed for this period showed them to be significantly different, with slightly greater differences evident between those scoring low and medium than the medium-high comparison.²⁷

Multivariate Analyses. Multivariate analyses were done (a) to test whether study group differences and the PLP measure were independently related to retention (while other factors that could influence retention were controlled); and (b) to identify other factors that were important contributors to retention in this legally-mandated sample of treatment clients. In addition to these central study variables, a subset of predictor variables were identified for inclusion in these analyses from the extensive intake and six-month database (the data reduction procedures are detailed in Appendix A).

²⁵ Increasingly, drug treatment researchers favor depicting retention as a "survival function" (e.g., De Leon, 1991, Hser et al., 1991), which can display the cumulative proportion of individuals "surviving" (or staying in treatment) over a chosen duration (such as days after admission), while adjusting mathematically for the data being incomplete or "censored" in that we do not know how long individuals continued to stay in treatment (survive) after data collection was cut off.

²⁶ In fact, early drop out is greater than that shown in these figures, since the sample did not include individuals who had dropped out within a few days of admission to treatment, before they could be recruited for the research. Taking into account the fact that there were nine early DTAP dropouts (and probably an equivalent number of comparison clients), the actual proportion retained is about 8% less than that shown in the figures.

²⁷ For the overall group differences: log rank=16.49, df=2, p<.001; difference between curves for the low-medium groups: log rank=7.05, p<.01; between low-high: log rank=15.71, p<.0001; medium-high: log rank=5.77, p<.05.

Figure 4C: Retention as a Survival Function

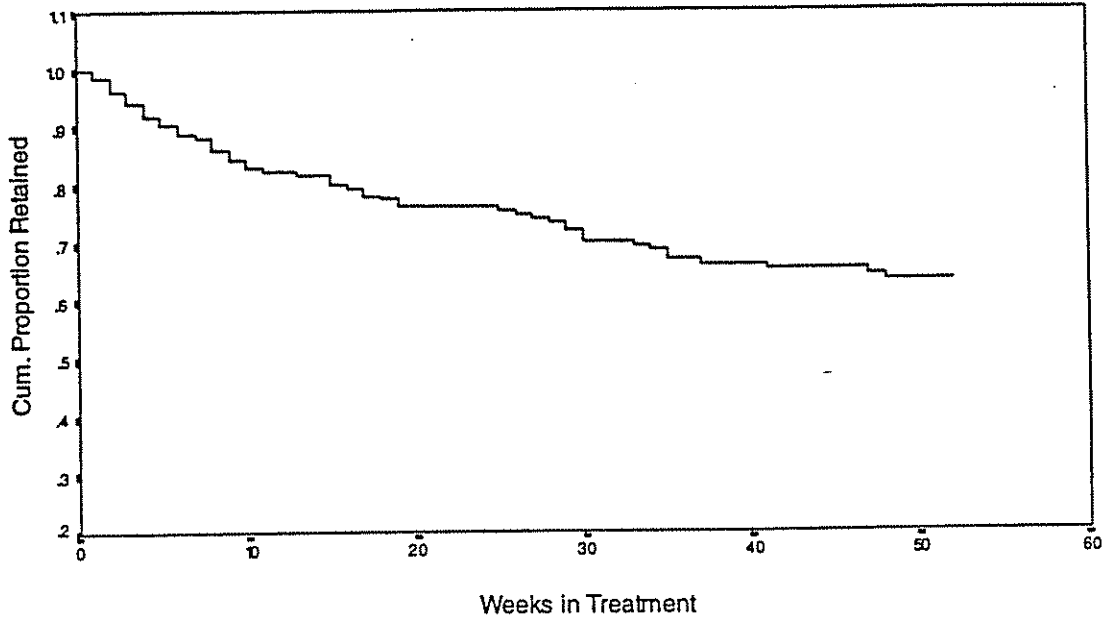
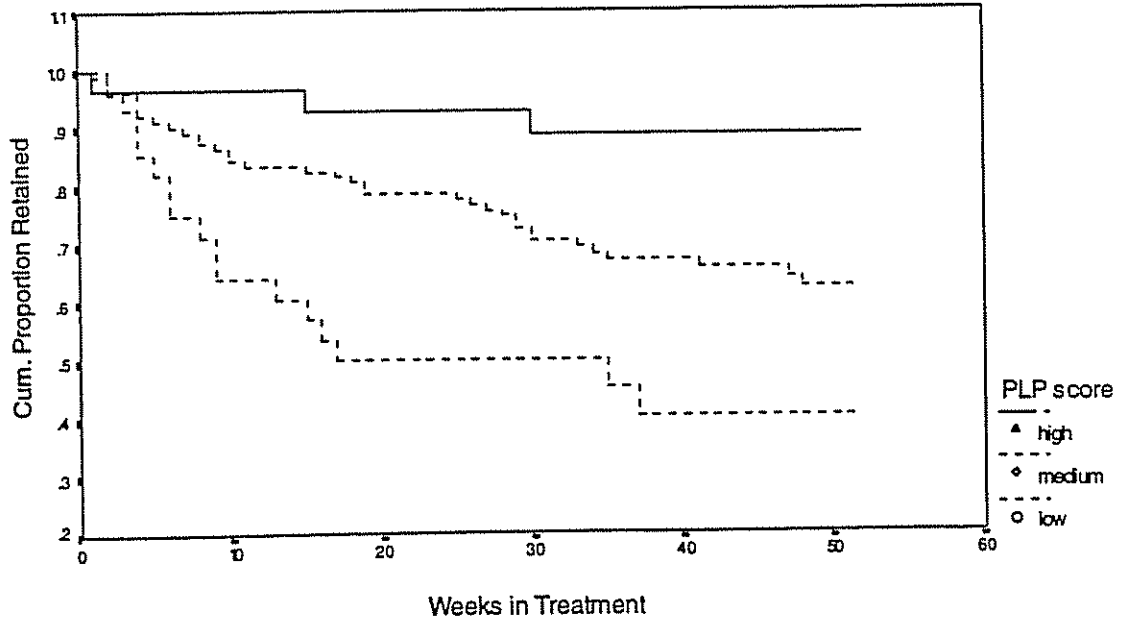


Figure 4D: Survival Rates by PLP Scores



Three of the four multivariate models we constructed in the analyses focused on retention during the first 180 days after admission, when attrition is greatest. Logistic regression procedures were used to assess the ability of PLP and other factors to predict retention (or conversely, attrition) at 90 days and 180 days. A multiple linear regression model was also devised using days in treatment up to 180 as the dependent or criterion measure. Finally, a multivariate survival method, Cox's proportional hazards model, was utilized to examine the entire follow-up period reflected in the available data, taking into account censored information. Since results from the latter analysis were very similar to those observed in the logistic and multiple regression models, the Cox regression results are discussed only briefly here and presented fully in Appendix A.

Consistent with the bivariate analyses, the study group variable did not contribute to either model, disproving our hypothesis that DTAP participants would show greater retention than the comparison sample. The second hypothesis, however, was upheld in the logistic models, with the PLP score appearing as the strongest predictor of 3- and 6-month retention along with another variable, prior TC admissions. To illustrate using the 90-day model, the odds of remaining in treatment for at least 90 days is nearly five times greater (4.93) for someone scoring high on the PLP than someone who scores in the medium range. The odds ratio shows the change in odds for each increment of one on the predictor, so it can also be said that odds of someone being retained increases by a magnitude of 4.93 if they score in the medium rather than the lower range of scores on the PLP.

Table 4D displays results of the two logistic regression analyses. The statistics displayed at the bottom of the table indicate that the combination of variables that comprise the models are a good fit with retention outcomes. That is, the Chi-Square statistic is significant and, along with the log likelihood, of moderate magnitude. The pseudo-R² figures, which can be loosely interpreted as showing that the models account for over 50% (i.e., 51% and 67%, respectively) of the variance in the retention

Table 4D: Predicting Retention at 90 and 180 Days
Logistic Regression Results

Predictor Variables	90-Day Retention		180-Day Retention	
	coefficient	odds ratio	coefficient	odds ratio
Age at admission	○	○	.10*	1.11
Highest grade completed	.33 [†]	1.39	○	○
Employment income, prior year	.12 [†]	1.13	.10 [†]	1.1
Number of psychological problems, lifetime	-.40*	.67	-.43*	.65
Crack cocaine is primary problem drug (=1; other drug reported = 0)	-1.15 [†]	.32	○	○
Prior admissions to TC treatment	-1.51**	.22	-1.24**	.29
Money from family, friends in prior month (log transformation)	-.32**	.73	○	○
Family involvement in CJ system (=1; no involvement = 0)	○	○	-.50*	.60
Number of prior prison sentences	○	○	-.64*	.52
CMRS Circumstances subscale	.77*	2.15	○	○
CMRS Readiness subscale	○	○	.57*	1.76
North Center (=1; other TCs = 0)	-1.14*	.32	-1.40**	.25
Study group (DTAP = 1; comp. group = 0)	-.95	.39	.86	2.4
PLP score (low = 0; moderate = 1; high = 2)	1.59**	4.93	1.16**	3.20
<u>Model Statistics</u>	Chi-Square	53.19**	61.17**	
	N	161	153	
	% Cases correctly classified	87.6%	83.0%	
	% Improvement over chance	71.3%	61.0%	
	Log-likelihood	98.66	112.53	
	Pseudo-R ²	.52	.67	

○ = variable not selected for entry; [†] p < .10; * p < .05; ** p < .01

outcomes, are quite high. The 90- and 180-day models improve prediction of retention by 71% and 61%, respectively, over chance. The relative contribution of each predictor or covariate in the models is best assessed using the odds ratio, or more precisely, the change in odds, shown in the right hand column of each section.

It is not surprising that PLP appears to have a greater impact early in the client's treatment stay, as indicated by a higher odds ratio for PLP at 90 days (4.93) when compared to 180 days (3.20). Similarly, these models show that other external factors (pressure from family, employers) as measured by the CMRS Circumstances subscale are predictive of retention at 90 days, while Readiness (to view the treatment setting as the locus of personal change) enters the picture later in the client's stay.

In general, the more the odds ratio differs from one, the greater the impact of the variable, and odds ratios less than one indicate a negative relationship. Thus, prior admissions to TC treatment and the variable indicating attendance at North Center show the greatest reduction in the odds of being retained at both three and six months. Other factors that showed high inverse correlations to retention in these logistic models included: financial assistance from family and friends and being a primary user of crack (both at 90 days only); having a prison sentence on your record (at 180 days only); and psychological problems throughout the first six months. It is interesting that the simple, self-reported psychological measure taken from the ASI was a better predictor of retention than the more sophisticated scores generated by the SCL90R and Beck's instruments, which were not selected for inclusion in these models.

Treatment Length of Stay: Multiple Regression Analysis. In addition to the group and PLP variables which were forced into the model, ten covariates were selected for entry in a multiple regression analysis of days in treatment (up to 180). The combination of variables accounted for a significant and relatively substantial proportion, 37%, of the dependent measure's variance.

With few exceptions, the same set of variables that emerged in the logistic regressions were found predictive of treatment length of stay, including PLP score.

Table 4E: Predicting Length of Stay in Treatment (to 180 Days)
Multiple Regression Results

Predictor Variables	coefficient	standardize	T-statistic
		d coefficient (β)	
Employment income, prior year (log transformation)	1.50	.12	1.67 [†]
Number of psychological problems, lifetime	-9.21	-.22	-3.11**
Crack cocaine is primary problem drug (=1; other drug reported=0)	-20.90	-.16	-2.21*
Prior admissions to TC treatment	-17.54	-.15	-2.07*
Money from family, friends in prior month (log transformation)	-3.73	-.15	-2.12*
Number of prior prison sentences	-10.67	-.16	-2.35*
Juvenile arrests (number under 16)	-6.02	-.11	-1.62 [†]
Number of prior violations	12.25	.14	1.98*
CMRS Circumstances subscale	10.0	.15	2.15*
North Center (=1; other TCs=0)	-21.66	-.18	-2.58*
Study group (DTAP=1; comparison group = 0)	-3.38	-.03	-.45
PLP score (low=0; 1=moderate; 2=high)	18.43	.19	2.68**
<u>Model Statistics</u>			
	R ² = .37		
	F = 6.82**		
	df = 12, 141		

[†]p<.10; * p < .05; ** p < .01

Shown in Table 4E, the regression coefficient for the PLP variable indicates that, with other factors in the model held constant, persons who judge legal pressure as high average 18 more days in treatment (i.e., 18.43 days during the first 180 days after admission) more than those who score in the medium range on the measure (and the same can be said comparing medium to low scorers). Attending North Center is associated with 22 fewer days in treatment compared to the other provider sites. The multiple regression showed no effect for attending DTAP as compared to the other programs.

Along with more prison sentences, reporting more arrests as a juvenile is predictive of dropout. Echoing a pattern observed in bivariate analyses, a record of relatively minor, non-violent crime was associated with greater retention, as reflected by the positive and significant coefficient for the violations variable.

Assessing Mandatory Treatment Strategies Using the PLP Scale

The relational analyses discussed above showed that overall PLP scores were significant, independent predictors of treatment retention in a sample of legally mandated clients. A secondary set of analyses were performed to begin to explore different components of legal pressure and the relative contribution of individual scale items to retention.²⁸ Table 4F at the end of this section lists items from the PLP that were correlated with days in treatment up to six months. Items are listed within their content categories, and the table identifies the number of items in each of the categories that were predictive of retention.

²⁸ Underlying these analyses are questions concerning the quality of the PLP scale. In addition to questions of reliability and validity (addressed earlier), a question arose about the generalizability of the measure: Is the PLP effective in predicting retention of offenders participating in a variety of mandated treatment programs? Simple bivariate analyses suggested, in fact, that the scale was *more* effective with the comparison group in this research, in that the zero order correlation between PLP and days in treatment was .37 among the comparison group, while PLP score and days in treatment have a .15 correlation among DTAP participants.

Of the eight items that could be categorized as addressing information/knowledge, six had zero-order correlations above .1 with the days in treatment criterion, and four were significantly related ($p < .05$) to this retention measure. All seven of the enforcement items had correlations above .1 and three of these were significant. Items within the other two groupings were less predictive of retention: Five of 12 monitoring items had correlations above .1 and just two were significant, and three of the seven severity items had correlations above .1 and only one was significantly related to retention.

The table also shows the zero order r for each item, and displays mean scores for DTAP participants, TASC clients, and all other comparison group subjects (probationers, parolees, and other court-mandated cases). By comparing these groups' scores on these items, it is possible to explore program strengths and weaknesses as they relate to clients' perceptions of coercion. (*Explore* is the operative term here, given the small sample sizes of the TASC group and the diverse legal circumstances represented in the two comparison groupings.)

One evident strength of DTAP is the program's policy of requiring all participants to sign agreements that specify the conditions of participation and the consequences of failure. Items tapping this practice showed significant correlations with retention, and DTAP clients scored much higher on these items. The three groups of clients did not differ, however, on related information/knowledge factors that predicted retention – such as being clear and consistent in explaining the consequences of failure.

On the two monitoring items that were significantly related to retention, TASC clients had the highest scores, followed closely by DTAP. The pattern of higher TASC and DTAP scores was also evident on two of the enforcement items. With the program's specialized warrant enforcement team, DTAP was expected to score high on these items. It is somewhat surprising, however, that TASC clients would also have high scores on these items, given that this program has no independent enforcement capacity and relies entirely on voluntary returns and police warrant squads.

The lone severity item that was predictive of retention was one which could be categorized as an enforcement item, since it concerns whether the respondent believes s/he would be detained upon failing in treatment, rather than being released to the community. Judging prison as highly aversive was marginally associated with longer stays. It is notable that one of the most commonly employed ways of inducing coercion and convincing mandated clients to stay in treatment – threatening them with long custodial stays if they fail – was not related to retention in this study sample.

Table 4F: PLP Items Correlated with Retention

Category & item name (PLP #)	Item description	Score range, \bar{X}	r with Retention	DTAP (N=86)	TASC (N=23)	Mean score on item Other Comps. (N=52)
<u>Information/Knowledge</u>						
<ul style="list-style-type: none"> category had eight items, four of which were correlated with retention @ p<.05 						
SIGNRULE (6)	respondent (R) made promises, signed agreements about following rules of program participation	0-5, 2.6	.19**	3.1**	2.1	2.0
SIGNCONQ (7)	R made promises, signed participation agreements that specified legal consequences of failure	0-5, 2.5	.15*	3.0**	2.0	1.8
CLEAR (19a)	CJA made consequences clear to R	0-4, 3.1	.20*	3.0	3.4	3.2
CONSIST(19f)	CJA consistent in explaining consequences	0-4, 2.9	.19**	2.9	3.0	2.8
<u>Monitoring</u>						
<ul style="list-style-type: none"> category had twelve items, two of which were correlated with retention @ p<.05 						
MONCJA (24a1-b1)	number of CJAs monitoring, supervising R's attendance	0-4, 2.5	.16*	2.6	2.9*	2.1
MONPOOR (10)	CJA would find out if R is doing poorly in treatment	0-4, 2.7	.16*	2.7	2.8	2.7
URINWHO (25a1-b1)	who conducts urinalyses (no one, treatment program, CJA)	1-3, 1.7	.14'	1.7	1.8	1.6

Category & item name (PLP #)	Item description	Score range, \bar{X}	r with Retention	DTAP (N=86)	TASC (N=23)	Other Comps. (N=52)
<u>Enforcement</u>						
	<ul style="list-style-type: none"> category had seven items, three of which were correlated with retention @ $p < .05$ 					
ENFAPP (26a2-b4)	number, type (standard vs. specialized warrant squad) of CJAs who search for and apprehend absconders	1-4, 2.7	.16*	2.8	2.9	2.5
AVOID (19e)	only way to avoid jail or prison is staying in program	0-4, 3.3	.18*	3.3	3.3	3.2
APPTOP (19b)	going after treatment failures is priority for CJAs	0-4, 2.8	.18*	2.8	3.2*	2.5
CATCHWHN (15)	CJA can quickly find and return R if s/he absconds from treatment	0-4, 1.9	.16†	2.1	1.8	1.7
<u>Severity</u>						
	<ul style="list-style-type: none"> category had seven items, one of which was correlated with retention @ $p < .05$ 					
RORBAIL (16)*	low chance of being released to community if absconds or otherwise fails in treatment	0-4, 3.3	.22**	3.4	3.2	3.2
PRISBAD (21)	prison aversiveness rating (relative to other sanctions)	0-4, 2.4	.14†	2.4	2.5	2.2
TOTAL PLP SCORE		48-105, 75.6	.30**	78.5**	77.0	70.2

Chapter Five:

Summary, Discussion, and Conclusions

Introduction

In recent years, the notion that “legal coercion works” has proved compelling to policymakers striving to maintain public safety while reducing the costs of incarceration. The currency of this message in some academic and policy circles has tended to overshadow the fact that little is known about the variety and effectiveness of legal pressure that can be used by the criminal justice system to refer and maintain substance abusers in treatment. Moreover, there is a surprisingly little known about retention in drug treatment generally, despite a widespread consensus that retention is perhaps the best predictor of reduced drug use and crime and other positive outcomes.

This research was aimed at the intersection of these broad policy issues: testing whether a prosecutor-based treatment diversion program with uniquely coercive program elements was more effective in retaining participants than more conventional mandatory treatment programs; and creating a way to measure perceived legal pressure, and assessing whether persons who perceive greater coercion stay in treatment longer and at higher rates than those perceiving less coercion. Secondary goals of the study included identifying other factors that predicted retention in a sample of legally-mandated treatment clients, and exploring whether certain aspects of coercion were more important than others in affecting retention.

DTAP and High Retention Rates

The hypothesis tested by the study’s quasi-experimental design, that DTAP participants would show greater retention than a matched comparison sample of other legally-mandated clients, was not confirmed. Compared to TC retention rates reported in the general literature (Lewis & Ross, 1994; Condelli, 1994; De Leon, 1993), rates of both

groups in this research were quite high. At three months after admission, for example, the retention rate in the DTAP sample was 77%, while the comparison sample's rate was 69% – not a significant difference.²⁹ DTAP's retention rate was in line with our expectations (and with rates presented in previous operations reports on the program [Hynes & Powers, 1996]). The hypothesis was disproved because the comparison group showed similar, unexpectedly high retention.

There is little in the overall sample description – serious drug and criminal histories, low socioeconomic status, relatively high prevalence of medical and psychological problems – to account for such high retention. Only one background factor, age, may favor the sample. At an average age of 31.3 years, our subjects were slightly older than some samples described in the literature (although they were no older than the total sample of admissions to the large, urban TCs from which they are drawn). Some studies have suggested that older clients tend to remain in drug treatment (Stark, 1992; Hubbard et al., 1989).

One program factor that may explain the two groups' high retention is the quality of the treatment programs studied in this research. These TCs were initially selected as DTAP treatment sites because of their reputed quality and they may be especially effective at retaining clients.

Another plausible explanation for the retention findings is that both samples comprise a sub-group of all criminal justice-involved treatment clients who experience a relatively high level of legal pressure. To be included in the research, individuals had to identify a legal consequence they might incur if they failed in treatment, and a legal agent who was at least ostensibly monitoring their treatment status. About one-fourth of those classified by TC program staff as criminal justice-involved clients (including many who were said to be "mandated") did not meet this criterion. Countering the widespread assumption that half or more of the clientele in long-term residential

²⁹ These rates take into account the estimated 8% of each sample pool who dropped out within a few days of admission to treatment and could not be recruited for the research.

programs have criminal justice system involvement, our data suggest that no more than 20 to 33% of the adult residents in the four large TCs taking part in this study had formal treatment mandates.

The disparity between the comparison group's retention and rates typically reported in the general TC literature underscores the need to distinguish among types of treatment clients, and particularly to be more precise in identifying "criminal justice-involved" clients in future studies of retention and other outcomes.

Diffusion of DTAP Effects? Still, the question remains: If DTAP has uniquely coercive program components, why did the comparison sample show the same retention outcomes? One answer, considered below, is that the components unique to DTAP have less impact on retention than other coercive elements that are common to both samples (or that programs represented in the comparison sample have their own unique, effective coercive elements). Another is that the high retention in both groups reflects a generalizing or diffusing of DTAP practices and effects to the comparison sample clients who attended the same TCs as DTAP participants. This interpretation was anticipated to some extent by statements from treatment personnel who reported in interviews that distinctions between criminal justice programs were not particularly salient to line staff and that the varying policies of these programs infrequently surfaced in day-to-day dealings with residents. DTAP's strong record of apprehending and enforcing sanctions on absconders may generalize to the other criminal justice programs. DTAP cases may serve as examples for all legally-mandated clients, thereby enhancing the credibility of threats made by judges, TASC, probation, and parole officers.

Of course, diffusion could work both ways – the presence of TASC's case managers may have a favorable impact on DTAP and other participants. Treatment staff usually singled out TASC with DTAP as the most prominent and highly regarded criminal justice program. Several respondents indicated that many of the monitoring practices which began with TASC and DTAP were now in use with all criminal justice

clients. It is also possible that the reporting and monitoring practices central to Probation and Parole's outpatient initiatives may generalize to their residential clients. Unfortunately, there is no way to confirm these diffusion explanations given the mixing of mandated clients in these treatment programs.

Predicting Treatment Retention

The PLP Scale. Before assessing PLP's role in retention, analyses focused on the measure itself; these showed mixed results. Preliminary analyses led us to drop some items and suggested that others should be improved. Some results from inter-item and factor analyses were negative, indicating that distinct, measurable subscales reflecting the four PLP categories (information, monitoring, enforcement, severity) could not be created.³⁰ Analyses intended to assess the overall measure's concurrent and predictive validity showed moderately favorable results. The overall scale had good distribution and reliability, with a standardized internal consistency coefficient (Cronbach's α) of .78.

As expected, DTAP participants scored higher on the PLP (a finding confirmed in multivariate analyses) and overall scores conformed with the anticipated pattern of TASC clients scoring nearly as high as DTAP, and other members of the comparison sample showing lower scores (Figure 4A on page 37).

³⁰ The failure of items intended to be alike in meaning to intercorrelate is at least partially attributable to the diverse response formats used in the questionnaire. Future development of the scale should address this problem, and, ideally, limit the scale to one or two different response formats. The Likert-type items were among the most effective items in the scale (in terms of shared variance with other scale items and with retention) and should be expanded. Items which share little variance with other items or the overall scale but show predictive or concurrent validity should serve as models for additional related items (or they should be dropped or used in a different scale). Attention should also be paid to balancing the number of items in different content areas, and to constructing items that address a single area/dimension (rather than combining swiftness and severity in a single item, for example). Improvements in these areas would yield a scale that permitted more direct comparisons of the dimensions present or absent in a given mandatory treatment program

Both in bivariate and multivariate analyses of several different retention outcomes, total PLP score was shown to be a relatively good predictor of retention, confirming the study's second major hypothesis. With numerous other variables related to retention entered in multivariate models, the PLP score remained the best predictor of retention in three of the four models, and among the best in the fourth.

In two of the multivariate models, we tested whether the odds of staying in treatment changed depending on whether an individual viewed legal pressure as low, moderate, or high. One logistic regression analysis indicated that an increment of one on the PLP measure – from a low to moderate score, or from a moderate to a high score – meant a fivefold increase in the odds of staying in treatment for at least 90 days. In another logistic model, the odds of staying in treatment for at least 180 days was shown to be over three times greater for someone scoring in the middle range of the PLP compared to someone with a low score (or scoring a high vs. a moderate score). An OLS multiple regression showed that for each increment of one (moving from low to moderate, or moderate to high) on the PLP, time in treatment increased by 18 days over the first 180 days after admission. These findings upheld the bivariate results depicted in Figure 4B on page 40: At 90 days, the retention rate for the low scoring group was 61%, compared to 84% for moderate scores and 96% for high; at 180 days, the rates were 50% for the low scoring group, 78% for moderate, and 93% for high scores.

Other Predictive Factors. The multivariate models also yielded a consistent set of other factors that were predictive of retention, including several that have been implicated in prior studies (Condelli, 1994; Stark, 1992; Anglin & Hser, 1990a). Those who stayed were less likely to report psychological problems, had higher educational attainment, better employment history, and were older. Retained clients reported less crack cocaine use and had a less extensive state prison record.³¹

³¹ In one of the models, number of prior violations (i.e., low level offenses such as disorderly conduct) was shown to be *positively* associated with days in treatment. Bivariate analyses indicated that both violations and prior drug crimes had a positive relationship with retention, while more serious criminal involvement (as indicated by violent crime and prior prison sentences) had a negative association and

A factor that predicted dropout in three of the four models was obtaining financial support from friends or family just before treatment entry. Intuitively, this should come as no surprise, however we have not heard of such a finding in previous research. TC practitioners argue that income from family or friends signals "enabling" and can foster dependence that impedes retention and recovery. Alternatively, these intensive residential programs, which require breaking off all communication with family and friends for the first several months of treatment, may simply be the wrong match for some individuals who are close to their family and would benefit from their support. Several critics have remarked that criminal justice programs rely too heavily on matching the treatment to the legal sanction (e.g., those diverted from longer prison sentences are referred only to long-term residential treatment) and not to the level or type of intervention best suited to the clinical needs of the individual.

A significant contributor in three of the four multivariate models, the Circumstances subscale of the CMRS was the only motivational measure (other than PLP) associated with retention. The CMRS Readiness scale was found to be associated with six-month retention in one logistic analysis. None of the other motivational measures or any of the program measures (from the M/PS, SOCRATES, COPES or TSR) were related to retention criteria in the multivariate analyses.

The negative association between prior TC treatment admissions and retention was somewhat unexpected. Results from previous research have not been consistent as to the role of this variable (Stark, 1992; Lewis & Ross, 1994), although clinicians generally view prior admissions as positive predictors of retention. Given that the sample was limited to legally-mandated clients, however, this finding may reflect something that practitioners are all too familiar with – a revolving door pattern among clients who have had previous mandates to attend treatment. It was notable, in this

predicted dropout. It will be interesting to see if future studies that limit their focus to criminal justice-involved clients reveal this same distinction in the data between non-violent violators and drug sellers, and those who had served prison time, and/or had violent histories.

regard, that bivariate analyses showed that DTAP had significantly more clients that were new to treatment, suggesting that the program had greater success than others in engaging individuals who might not otherwise have attended treatment.

The fact that the North TC site consistently emerged in the multivariate analyses as associated with lower retention rates was also unexpected, particularly since interviews with TC administrators and program staff did not reveal any significant policy differences among the four programs that could have affected retention. In subsequent discussions about the finding, North Center administrators offered the explanation that, compared to the other sites, they may push clients to be more self-revealing and self-critical early in treatment, a process they described as requiring their residents “to do more work on themselves up front.” North’s lower retention rates appeared limited to the first six months after admission, as no program differences were found in the survival analysis.

Predicting Retention: The Overall Models. When compared with previous studies of drug treatment retention, the combination of variables assessed in this research performed well in predictive models. The multiple regression analysis provides perhaps the clearest comparison with earlier research. In reviewing prior studies involving therapeutic communities, Condelli observes that no more than 5-10% of the variance in retention is typically explained in regression models, and reviews other studies that have R^2 values (indicating retention variance explained) ranging from 21-41% (Condelli, 1994; Condelli & De Leon, 1993). The R^2 value of 37% compares favorably with these figures. The relatively good fit between the present set of predictors and the retention outcome is even more notable given the restricted range in the outcome measure – i.e., the surprisingly low attrition rates for both study groups through six months makes it more difficult to predict who would stay and who would leave treatment early.

Our findings indicate that the PLP measure is partly responsible for this improved predictive model. Nonetheless, it is too early in the development of the PLP to make

claims about the magnitude of contribution attributable to the scale. Based on a simple zero-order correlation, the PLP accounts for about nine percent of the variance in six-month retention and accounts for as much as 20% when a shorter, but somewhat less reliable version of the measure is used.³² As the final variable in a hierarchical regression model, on the other hand, the current PLP accounts uniquely for between three and four percent of the variance in retention at 180 days. So, other than expecting PLP to be a *relatively* powerful predictor of retention, there is no way of knowing how much an improved version of the scale will contribute to these multivariate models.

Limitations and Future Research. It is also not clear how much the present findings are tied to the sample studied in this research. One possible explanation for the improvement in predicting retention is that by limiting the study to those who came to treatment under a clear criminal justice mandate, the sample was less diverse (had less random error or 'noise') than those in more general studies that include both criminal justice-involved and voluntary clients. Moreover, while the sample appears generally typical of criminal justice-referred TC clients in New York City – persons of color with serious drug and crime involvement, poor vocational and educational histories, and including substantial subgroups with medical or psychiatric problems – it has some specific differences, being disproportionately Latino and heroin-using, and, in the case of the DTAP sample, devoid of persons with violence on their record or with prior TC admissions.

While the major findings of the study relating to the PLP were obtained with these variables controlled statistically, it will be important to reassess them with a more heterogeneous sample. We are currently undertaking this work under National Institute of Drug Abuse (NIDA) funding, in a study that extends the comparison sample beyond the DTAP matching criteria used in the present research. Additional research efforts

³² An exploratory analysis focused on the 18 PLP items that had the highest bivariate correlation with the retention outcomes; as a summated scale, the 18 items had a zero-order correlation coefficient of over .4 with days in treatment (compared to .30 for the full 34-item scale. Reliability of the 18-item scale (coefficient alpha) was .66.

are needed to address limitations inherent in both the present research and the NIDA work, including assessing PLP effects in other modalities and other criminal justice initiatives, including drug courts.

At a more fundamental level, both the present research and the NIDA study are limited by their correlational research designs. Confirmation of PLP's role in retention awaits a stronger, *a priori* experimental or quasi-experimental design, where individuals are identified prospectively as high and low on PLP (but who are otherwise the same) and tracked and compared on retention and other outcomes.

Future work should also include measures of positive factors that can enhance retention. Some drug courts have reported success incorporating rewards such as reductions in sentence lengths or reporting requirements for staying in treatment. The converse of DTAP's coercion is that graduates are rewarded with a dismissed case and a sealed arrest record. Since beginning in 1990, DTAP has also taken another approach, providing assistance in making the transition to the community after treatment, through housing and vocational support. Originally intended as a way to consolidate and maintain gains made during treatment, these enhanced services have come to be viewed by DTAP administrators as incentives for staying in and completing treatment. This perspective may become increasingly significant to poor, unemployable participants from the inner city, who must deal with new welfare limitations and workfare requirements in a bleak vocational market.³³

Quantifying Legal Pressure in Criminal Justice Programs

In addition to providing a way to quantify legal coercion in general, the PLP was intended as a measure of the different elements of coercion, such as monitoring and enforcement. This kind of assessment has the greatest potential for operational utility:

³³ Data from interviews done at intake and two months later show no positive effects from anticipating these services up through six months post-admission, however they are likely to have their greatest impacts later in the treatment stay, when client participate in the services.

What kinds of pressure are most salient to participants in current programs? Given their relative effects on retention, what coercive elements should programs emphasize? What changes can individual programs make to maximize retention? The present study cannot provide definitive answers to these questions, given that the PLP needs further development based on the item analyses and validity findings (particularly the factor analysis results) described above. Nonetheless, it is illustrative to consider the pattern of program differences evident in these early data, as a first step toward assessing the value of different coercive strategies. In considering scores on individual PLP items, note that they reflect clients' views within a week or so of their admission (when the scale was administered) and thus are particularly affected by early interactions with legal agents, program staff, and information gathered from the client grapevine, which tends to be well developed in treatment programs. These views are likely to change over time.

Elements of Coercion. About half of the information and enforcement items included in the measure were predictive of retention. By contrast, only two of the twelve monitoring items and one of the seven severity items were related to retention. These findings suggest that providing information to mandated clients about the conditions of treatment participation and consequences for failure – and convincing them they will be enforced – are effective coercive strategies. This echoes, in many respects, the graduated sanctions policies developed in the Oakland Drug Court and elsewhere, where participants are told in advance how they can gain or lose points toward fulfilling their treatment mandate, and the court responds to pre-established point standards with punishments and rewards (Tauber, 1993).

There is no support in these early results for imposing or threatening clients with long jail or prison terms as a way to enhance retention in treatment. Individuals who reported that they expected to serve prison sentences of three years or more for failing in treatment were no more likely to remain in treatment than individuals who said they expected lesser penalties for failure. The findings are not so clear as to whether

perceptions about monitoring of treatment compliance affect retention. The fact that very few of the monitoring items predicted retention may simply be more evidence of the diffusion of DTAP, TASC and other programs with strong monitoring components to all legally mandated clients in this research. It may also be that respondents' views about monitoring are not well developed or informed early in their treatment stay and thus are not strong predictors of anything. The interviewers observed that subjects tended to express more uncertainty in responses to monitoring questions than other PLP questions.

Program Implications. Apart from suggesting general prescriptions for emphasizing and de-emphasizing certain coercive strategies, the PLP could have an immediate, pragmatic value as a program-specific diagnostic tool.³⁴ The findings suggest, for example, that DTAP's policies of informing the defendant and requiring signed, written contracts about the conditions of treatment and the consequences of failure are effective in bolstering retention. DTAP participants also averaged high scores on a PLP item about remanding failed clients which was a relatively strong predictor of retention, and on an enforcement item about being able to quickly find and return absconders to treatment. The moderate scores of DTAP participants on other retention-related enforcement items, however, suggest that the program could improve its retention through efforts to make participants more aware of the program's strong enforcement record during their stay in treatment.³⁵

³⁴ In this regard it is significant that the PLP was a stronger, more accurate predictor of retention in the comparison sample, since this group approximates the wide range of mandatory treatment clients and programs that might make use of the PLP.

³⁵ One apparently inconsistent finding about DTAP deserves an explanation. Specifically, since DTAP participants averaged higher overall PLP scores and overall scores were related to retention, why was there no evidence of greater retention in the DTAP group in the multivariate models? First, the DTAP-comparison group difference was confounded with a few variables (such as prior admissions to TCs and crack use) that were related to retention and entered the multivariate models. Second, additional analyses of the PLP showed that DTAP participants scored highest on some items that had no association with retention, while not scoring high on several items that were related to retention. On three of the eight severity items, for example, the DTAP group had significantly higher scores, but none of the items was related to retention. As noted above, on some monitoring and enforcement items that were related to retention, DTAP participants did not show particularly high scores.

A comparison of DTAP and TASC results on the apprehension and enforcement items suggests the value of focusing on subjective perceptions that are not always congruent with – and may actually prevail over – objective indicators of program practices. TASC clients' high scores on some of these items, in the absence of any independent capacity to apprehend absconders, are surprising. It appears that this program's "fear of God" strategy, emphasizing cajoling and threats delivered in early meetings between the client and TASC staff creates the perception of enforcement. The case manager's phone calls, program visits, and use of court appearances and graduated responses to early signs of dropout may reinforce this sense of enforcement. At least in the short run, verbally reinforcing the message may be just as effective as enforcing it with a specialized warrant squad.

Limited to the first several weeks and months in treatment, these results do not speak to the long-term effects of enforcement policies and practices. After several months in treatment, mandated clients may learn to distinguish programs that cannot or do not follow through with threats. TASC's use of brief, 'reminder' jail stays for clients at risk of failure may be their most important enforcement strategy over the long run. As noted above, the credibility of TASC and other programs' enforcement message may also depend in part on DTAP's strong record of apprehending and sentencing absconders. In less fortuitous circumstances, when there is no DTAP to serve as an example, programs that cannot afford a strong enforcement component should consider pooling resources to fund a shared enforcement capacity.

Conclusions

Building on the TOPS research (Hubbard et al., 1989; Collins & Allison, 1983), work by Anglin and colleagues (e.g., Anglin & Hser, 1990b), and other research on retention (e.g., Condelli, 1994), this study offers support for mandatory treatment programs and the notion that progressively higher levels of perceived legal pressure can increase treatment retention. Expanding use of programs that provide clear mandates to

participants and convince clients that they face certain, but not necessarily severe, legal consequences is recommended by the findings.

One finding suggested that, at least in the short run, mandated clients can perceive that consequences will be enforced, even if there is little capacity or will to apprehend absonders and to sentence failed cases to prison terms. There needs to be more research about the effects of different enforcement practices on long-term retention, and comparisons of programs that carry out strong enforcement records with programs that emphasize frequent enforcement messages and intermediate responses to clients at risk of failure. Programs that combine both approaches may have the best retention outcomes.

The evidence gathered in this research did not suggest that the DTAP program was uniquely successful at employing coercive principles to retain participants in treatment. A matched group of other mandated clients stayed in at equally high rates, suggesting that it was the quality or magnitude of coercion in both groups (or other factors unique to both samples) that led to retention. The unexpectedly high retention rates shown in the comparison sample may also reflect a diffusion of DTAP (and perhaps TASC) program effects to these other mandated clients. At minimum, these findings point to the need for better definitions of mandated clients, and for more research comparing this apparent sub-group of more serious or formally mandated clients with other 'criminal justice nvolved' clients and voluntary clients.

This research also provides empirical support for conceptual principles underlying the Perception of Legal Pressure Scale and its utility as a measurement tool. While further work on the PLP is needed, it appears promising as a method for assessing the effectiveness of different program strategies aimed at retaining substance abusing offenders in treatment.

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APPENDIX A

Technical Supplement

Overview: This appendix provides additional, supplemental detail on: (1) selection of subjects for the research and descriptive data on the sample; (2) original plans for data reduction and statistical analysis; and (3) statistical tests involving the interaction of PLP scale scores and other predictors (e.g., age, drug history) on retention, and results from an advanced multivariate analysis of retention known as a Cox proportional hazard model.

1. Sample Selection

About one-fourth of the DTAP participants entering treatment during the study's intake period (March, 1994-June, 1995) did not participate in the study. This group included four clients who chose not to participate in the research. Fifteen were missed because the site researcher was not informed about the individual upon their admission to treatment, or because we were unable to arrange to conduct the interview before the person was transferred to another facility in upstate New York. Nine individuals dropped out of the program within a few days of admission, before we could arrange to conduct the interview.¹

Selection of comparison group candidates took longer than expected because most clients entering the treatment study sites did not meet *both* major eligibility requirements: a demographic and drug history profile that matched the DTAP sample and a belief that they faced a legal consequence if they left treatment. Many individuals who treatment staff identified as having some criminal justice involvement were persons who had an open court case, and who reported to us that they had come to treatment on their own or on the advice of their attorney or family. Because the court had no knowledge of their participation in treatment, these individuals did not expect their participation to have any

¹ It should be noted that West Center was added as a DTAP treatment site during the course of the study and 39 DTAP participants entered this TC before arrangements were made to collect data at this site.

bearing on the disposition of the case or at least had no idea what the effect might be. Another group of newly-admitted treatment clients who were reported to be criminal justice-involved but were found to be ineligible for the study included parolees or probationers who reported entering treatment on their own and hence believed that no consequence would accompany early departure from treatment. A small number of probation and parole cases also said they had no idea whether a consequence would occur and did not know if anyone was monitoring their treatment. Pilot testing showed that individuals in any of these situations could not respond to most of the PLP items and were not appropriate candidates for this research.

The background data on DTAP subjects showed that, compared to other treatment clients, DTAP participants were older and more likely to be Hispanic, and heroin users. Individuals with this profile (and who met the criminal justice criteria) were always eligible for the comparison group, and those that met two of these three criteria were usually eligible, depending upon the demographic/drug history distribution of the two groups at the time of selection. Because DTAP participants did not fit the profile of the most typical criminal justice-involved treatment client – an African-American crack cocaine user – selection of the comparison group took several months longer than expected. To speed completion of the study, during the last three months of the fifteen month intake period we relaxed the drug history criteria and admitted proportionately more primary crack users to the comparison group (and statistically controlled for drug history in analyses involving the grouping factor).

The final sample size (86 DTAP experimental and 75 comparison group subjects) was in line with a power analysis done in planning the study. This analysis showed that with samples of 80 each, there was an 80% chance of detecting a small effect ($R^2 = .05$) for the grouping variable (DTAP vs. comparison), while controlling for two sets of covariates (background factors and motivation/program factors) in an F-test for variance proportions (Cohen, 1977).

Detailed descriptive information on the sample is shown at the end of this appendix in Table A1.

2. Data Reduction and Multivariate Analysis Plan

To prepare for multivariate analyses of retention outcomes, a data reduction strategy was employed to identify critical variables from the several hundred which were measured at the intake and two-month interviews. The strategy focused on both important individual items or measures and composite indices. Fortunately, all but a few of the instruments used in the study were designed to yield composite measures, including the ASI, CUAD, SCL90R, BDI, CMRS, SOCRATES, and COPEs.

Aggregate measures suggested by the developers of the TSR were also constructed for this instrument. The content and correlations among items in the M/PS questionnaire were examined and the items summed to create five discrete measures. Matrices of zero-order correlations between three measures of retention and sets of independent or predictor variables drawn from the interviews were examined.² The retention measures included in (=1) or out (=0) at 90 and 180 days after admission and a continuous measure of the number of days in treatment up to 180 days (with anyone staying 180 days or more coded as 180). As noted earlier, follow-up data were complete (i.e., they were not censored) for all study subjects for this six-month period. The survival curves shown above confirm that this period (and particularly the first 90-day period) is most critical, accounting for most of the attrition that occurs in these programs. Status at 90 days after admission is also the most common criterion assessed in previous studies of treatment retention (Anglin & Hser, 1990a).

In the first stage of data reduction, predictor items and aggregate measures were retained if they showed correlations of greater than .1 with two of the three retention measures, or above .15 (generally, significant at the .10 level of probability) with one of

² The matrix of ASI data included about 75 individual items and seven composites. The initial CUAD analysis included several aggregated items for each of the most commonly used illicit substances and a few total drug severity measures. Individual TSR and S/PM items as well as aggregated scores were assessed with these scales. All the other instruments yielded a relatively few number of composite subscales and, in most cases, a total score that were considered in the first set of correlation matrices.

the retention criteria. These variables were then grouped in sets to assess intercorrelations. Items were retained if they were not highly correlated with other predictors; if they were among a group of redundant variables, the variable(s) that had the highest correlation with retention and/or the fewest missing values was kept. When available and of similar predictive power, aggregate measures were selected over individual items. Additionally, several composite measures, and variables that were unrelated to retention in the bivariate analyses but are common in studies of retention (e.g., demographics), were retained in the final analytic dataset.

A combination of stepwise and hierarchical procedures were then employed to identify the most important individual contributors within sets of related variables that were entered as blocks in a hierarchical multivariate model. Once these variables were identified (10-20 variables), a stepwise procedure was used to identify the subset of them that had the strongest relationship with the retention criterion. All analyses included variables that were related to retention and were identified in the bivariate analyses as distinguishing the two study groups: crack use, drug treatment history, drug and violent crime history, and attendance in the North Center TC. Two variables – group and PLP – were then forced to enter in the final step of a simultaneous model, to assess the independent contribution of each variable when all other selected variables were controlled. Subsequent analyses tested whether certain hypothesized interactions of the PLP and other variables were predictive of the retention criterion.

3. Additional Statistical Analyses

Testing Interactions with PLP. Three interactions involving the PLP measure were of particular interest. One arose from prior research on perceived deterrence. Bivariate tests showed that individuals with less serious criminal records (as measured by numbers of prior arrests, convictions, felony convictions, incarceration time, etc.) were not more likely to score higher on the PLP (although drug sellers did). Taking this a step further, the interaction of PLP and various criminal history measures was tested as the third variable in logistic and multiple regression analyses (with the main effects of PLP and the selected criminal history variable forced in the model). None of the interaction terms

were significant (the PLP \times prison variable came closest, at $p=.12$). Contrary to what might be expected from prior deterrence research, then, having little prior criminal justice experience and higher PLP scores did not predispose an individual to greater retention (nor the converse – persons with more experience and low PLP did not have significantly higher drop out rates).

Another series of tests for interaction effects emerged from a largely intuitive sense that PLP might have greater impact with individuals who are shown to have moderate motivation scores, while PLP would be less predictive of retention for those who enter treatment with especially high or low motivation. To test for this, CMRS scores were recoded to reflect a dichotomy of moderate and extreme (high or low) scores. This variable was entered as a main effect and as an interaction term with PLP in a simultaneous model (with PLP also as a main effect variable); only the PLP variable was significant in these models, and no further analyses were run.

An age \times PLP interaction was also tested, following earlier results from TC research (De Leon, 1988), which indicated that older clients showed decreased retention if they were legally referred, while voluntary clients showed an increase in retention with age. No interaction effect of this kind were observed in the present data. Similarly, various other interaction variables were tested and none approached significance as the third variable in exploratory logistic and multiple regressions (PLP with race/ethnicity, drug severity, primary heroin user, primary crack user, prior admissions to treatment).

Time to Treatment Failure: Proportional Hazards Model. Hazard functions are the inverse of survival functions, depicting the cumulative time to failure (or death or treatment dropout) over a particular period. Multivariate hazard and survival techniques are useful in studies of retention (or any time dependent criterion, such as recidivism or relapse) because they take into account the time it takes an event to occur as well as the occurrence of the event itself (Curry et al., 1988; Hser et al., 1991). A Cox proportional hazard model was constructed on the length of stay in treatment outcome, using the same pool of predictors and combined stepwise and hierarchical procedures discussed previously. While this analysis is still weighted by the more complete data available for the first several (6-9) months after admission, Cox models can handle “right censored”

data such as the retention outcome, thus yielding a broader analysis that is not targeted specifically to the first three or six months after admission.

The overall hazard model, shown below in Table A2, was significant and yielded a similar set of covariates to those identified in the logistic and multiple regression analyses. Like the logistic and OLS regressions, above, the predictors used in the model are a fairly good fit with the retention data, as indicated by the model chi-square value. Shown along with the unstandardized model coefficient and standard error, the Wald statistic provides a rough means of comparing the relative contribution of individual covariates to the model. PLP scores, money from friends and family, and prison history were the most powerful contributors in the model. Note that the direction of signs in Cox regression is opposite that in the other models, since they predict “hazard events” (i.e., drop out) and not survival (retention). The negative coefficient for the PLP score, for example, indicates that higher scores on PLP are related to lower or reduced likelihood of hazard or failure.

One notable difference between this model and the ones that were limited to retention outcomes in the first six months is that the North Center variable was not selected in the stepwise models. With other variables in the model held constant, this program no longer showed significantly lower retention rates when all available retention data were considered. Being in DTAP or a member of the comparison group continued to have no impact on retention in the hazard model. In addition to self-reported psychological problems, identified in the multivariate analyses reported in Chapter 4, the Beck Depression score was predictive of dropout in the present analysis. Having medical problems was associated with staying in treatment – a finding that was evident in the bivariate analyses but did not emerge in the other multivariate models.

Table A1: Descriptive Information on the Study Samples

Variable Description	DTAP (N=86)	Comparison (N=75)	All Subjects (N=161)
<u>Demographic, Employment, & Income Data</u>			
Age	31.5	31.0	31.3 (sd=6.7)
% Male	91.9	88.0	90.1
Race/Ethnicity			
Hispanic	62.8	60.0	61.5
Black	34.9	33.3	34.2
White	2.3	6.7	4.4
Highest grade completed	10.4	10.7	10.5 (1.8)
% With high school diploma or GED	17.4	29.3	23.0
% Married	14.0	10.7	12.4
% Unemployed in month before admission	74.7	67.4	70.8
Income from employment in past year	\$6,013	\$5,607	\$5,824 (9,565)
<u>Medical, Psychiatric Problems</u>			
% Bothered by chronic medical problem(s)	27.9	17.3	23.0
% Severely depressed (from Beck Depress. Inv.)	27.9	28.4	28.1
% Emotional, physical or sexual abuse, lifetime	17.4	25.3	21.1
Global Severity Index score (from SCL90R)	.61	.66	.63 (.50)
Positive Symptom Distress Index (SCL90R)	1.89	1.91	1.90 (.70)
Positive Symptom Total (SCL90R)	27.7	29.3	28.4 (17.2)
<u>Substance Abuse History</u>			
Prior admissions to drug treatment*	1.2	1.9	1.5 (2.1)
% prior admission to a TC program*	9.3	28.0	18.0
Primary problem drug			
% Heroin*	58.1	40.0	49.7
% Crack cocaine**	18.6	38.7	28.0
% Cocaine (powdered)	1.3	4.7	3.1
% Two or more drugs	7.0	10.7	8.7
Used daily or almost daily, prior 30 days			
% Heroin*	58.1	48.3	50.3
% Crack	25.6	37.3	31.1
% Cocaine	7.0	10.7	8.7
% Using one or more of above	76.7	68.0	72.7
% Meets DSM-III drug dependency criteria	86.1	89.3	87.6
% IV drug use, lifetime	18.6	10.7	14.9

*p<.05, **p<.01

[table continues on next page]

Table A1, continued

Variable Description	DTAP (N=86)	Comparison (N=75)	All Subjects (N=161)
<i>Criminal History</i>			
% Ever sold drugs**	92.9	73.3	84.0
% Sold drugs frequently in past year**	83.5	48.0	66.9
% Ever committed robbery	22.6	30.7	26.4
ASI legal problems composite score**	0.73	0.62	0.68 (0.22)
Prior arrests	7.1	7.1	7.1 (5.5)
Felony arrests	3.6	3.6	3.6 (2.5)
Felony drug arrests**	2.4	1.7	2.1 (1.3)
Felony convictions	1.2	1.1	1.2 (0.9)
Felony drug convictions**	1.0	0.65	0.86 (0.73)
% Violent felony arrest*	24.4	41.3	32.3
% Violent felony conviction**	1.1	13.3	6.8
% Prior prison sentence	24.4	33.3	28.6
<i>Motivation & Program Measures</i>			
CMRS total score	10.0	10.4	10.2 (3.2)
Suitability Subscale (CMRS)	2.4	2.6	2.5 (0.9)
Circumstances Subscale (CMRS)	2.5	2.5	2.5 (0.9)
Rule acquiescence (P/MS)	10.0	9.9	10.0 (1.6)
Client/Peer support (P/MS)	7.7	7.7	7.7 (1.5)
Staff involvement (P/MS)	8.0	8.0	8.0 (1.4)
Number of discussions about personal problems, past week (TSR)	8.4	9.6	8.9 (9.6)
Sessions with clinical or service professionals, past week (TSR)	8.2	6.9	7.7 (6.7)
Relationship Subscale (COPEs)	20.6	19.8	20.3 (4.2)
Personal Growth and Goal Orientation Subscale (COPEs)	27.3	27.4	27.4 (4.2)
System Maintenance and Change Subscale (COPEs)	22.0	21.6	21.9 (2.4)

*p<.05; **p<.01

**Table A2: Predicting Treatment Retention
Proportional Hazards Model Analysis**

Predictor Variables	coefficient	standard error	Wald statistic
Number of psychological problems in past 30 days	.30	.120	6.17*
Beck Depression Inventory score	.04	.019	5.18*
Number of medical problems in past 30 days	-.05	.026	4.19*
Crack cocaine is primary problem drug (=1; other drug reported = 0)	.55	.303	3.32 [†]
Prior admissions to TC treatment	.60	.288	4.36*
Money from family, friends in prior month (log transformation)	.15	.058	6.87**
Number of prior prison sentences	.35	.139	6.20*
CMRS Circumstances subscale	-.35	.167	4.51*
Study group (DTAP = 1; comp. group = 0)	.04	.312	.02
PLP score (low = 0; medium = 1; high = 2)	-.69	.245	7.97**
<p align="center"><u>Model Statistics:</u> Chi-Square: 55.10**</p> <p align="center">N: 154</p> <p align="center">Log Likelihood: 527.21</p>			

[†] p < .10; * p < .05; ** p < .01

APPENDIX B

Therapeutic Community Treatment and the Four Study Sites

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The Therapeutic Community Model

Therapeutic communities (TCs) are highly structured residential treatment programs designed to make major changes in the lifestyle of substance abusers including: abstinence from drugs, elimination of antisocial behavior, and development of employment and educational skills. To facilitate these changes, TCs offer comprehensive rehabilitative services. Vocational counseling and training, work experience, recreation, individual and group counseling, medical, family, legal and social services occur within the TC and are part of the treatment regimen. The treatment does not include use of any chemical substances such as methadone or antabuse.

TCs view drug abuse as a multi-faceted problem affecting some or all areas of social and psychological functioning. The primary therapist and teacher in the TC is the community itself, consisting of peers and staff who often are recovered addicts and TC graduates themselves. TCs use the interactions which arise between persons living together as a means of focusing on their behavioral and emotional problems and identifying right and wrong actions. Communal living provides the context for continuous learning where individual change in conduct, attitudes, and emotions is monitored and mutually reinforced in the day-to-day routine.

Most traditional TCs usually require clients to remain in treatment 15 to 24 months. During this time, clients progress through three distinct stages leading to live-out status and graduation: orientation (0-3 months), primary treatment (4-12 months), and reentry

(13-24 months). Primary treatment and re-entry also have graduated levels within each stage; clients begin at the lowest level and must move to the highest level before they can advance to the next stage. At each successive stage, clients acquire more status and privileges and assume more responsibility for program governance and incoming clients. Completion of the reentry stage is followed by up to six months of independent living that includes an aftercare plan.

Traditional TCs accommodate a broad spectrum of drug abusers including opiate, cocaine, crack cocaine and polydrug users. The clientele consists of persons who enter voluntarily and those under some type of legal mandate to attend treatment. Clients vary widely in demography and economic status as well as in the length and severity of their drug problem. Persons with severe psychological illness or debilitating physical problems generally are not accepted. Recently, some TCs have modified their programs to treat substance abusers who also have psychological problems.

The TC Treatment Study Sites

Sample Distribution. As noted in Chapter Two, about three-fourths of the sample in the present research entered treatment at the North or South Center sites. With 55 subjects, North Center had nearly equivalent numbers of DTAP experimental (27) and comparison (28) subjects. There were 62 study participants at South Center, with somewhat more in the DTAP group (36 as compared to 26 comparison cases). Twenty-six subjects, 18 of whom were DTAP participants, were admitted to the study from East Center, while 13 of the 18 West Center participants were comparison group subjects.³ Because the programs were highly similar in their structure and approach (see Chapter Three), the unequal distribution of the samples within the four sites was viewed as a minor, inevitable design flaw in this research.

³ The unequal distribution of samples across the sites was unavoidable and not unexpected. East Center has a somewhat smaller bed capacity than the other programs and admits relatively few criminal justice clients who are not in DTAP. West Center was added as a DTAP treatment site after we began this research and it was only during the last two months of the research intake period that we gained permission to interview subjects and collect data at this site.

Program Services. All four programs involved in this research offer a full range of services which augment drug treatment, including on-site medical care, H.I.V. testing and counseling, vocational training (both on-site and off-site), adult basic education (GED) classes, and assistance in obtaining jobs and housing. Treatment staff interviewed for this research were asked if there was anything that distinguished their program from the other three. North Center stressed its individualized treatment planning and early development of an H.I.V. curriculum. East Center cited its strong family and children's services component which works to reunite the families of addicts and its special residential facility for mothers and their young children. West Center noted its adolescent facility which is a fully accredited residential high school, and the quality of staff throughout the organization. South Center emphasized its holistic treatment approach and early use of the 12-step program.

Relatively minor differences among the four TC sites were revealed in analyses of program measures obtained at the two-month interview. Using scoring procedures suggested in earlier studies involving the TSR (McLellan et al., 1989), two measures indicating the amount of services (therapeutic/personal interactions and services delivered by professional staff) were created. North Center scored highest on the first measure (and significantly higher than South and East Centers) and lowest on the second (significantly lower than South). When these two indices were summed, no differences among the four sites were observed, suggesting that the TCs provide a similar amount of services overall, with some differences in the types of services they deliver.

On two of the three COPES subscales, differences were evident. On the Relationship Subscale, which concerns staff and peer involvement, support, and spontaneity, the West and East programs were rated somewhat lower than the other two sites. However, these same two sites scored highest on the Personal Growth/Goal Orientation Subscale. No differences were evident on the System Maintenance and Change Subscale. One of the composite scores from the M/PS scale showed a difference, with South Center rated higher than the other sites (and significantly higher than North) on staff involvement. These TC site differences reinforced the need to consider treatment measures and TC variables in analyses of retention, as noted in Chapter 4.

Criminal Justice-Involved Clients. A significant number of clients admitted to these programs have some type of legal status upon entry – either they are mandated to attend treatment by the court, Probation, or Parole, or they enter voluntarily but are involved with the criminal justice (CJ) system (e.g., criminal case pending in court). According to data provided by treatment staff, at the time these interviews were conducted, 45% of the admissions at the West and East programs, 42% at North Center, and 30% at South Center were CJ-involved clients.

Each program had a different mix of CJ clients. Sixty percent of East Center's CJ clients were referred from DTAP, 20% from TASC, 18% from the New York City Probation Department and 2% were mandated by Parole. At South Center, 40% were DTAP, 40% TASC, 5% City Probation, 5% Parole and 10% were referrals by judges from counties outside of New York City. At West Center, 22% were DTAP, 22% TASC, 22% City Probation, 9% Parole and 25% were referrals from judges. Forty-three percent of North's CJ clients were referred from Probation, 31% from TASC, 14% from DTAP and 12% were referrals from Parole.

Demography and Drug History. Demographic and drug history data on all adult residential admissions were provided to us by three of the four treatment providers. These data showed that East Center differed from the other providers in admitting proportionally more women (just under 40% of their clients) and Blacks (about two-thirds) and relatively few whites (12%). At South Center, Hispanics and whites were about equally represented at around 30% each, while the admissions at North Center were 38% white and 20% Hispanic. Educational attainment was similarly low across the programs, with 40-50% of all admissions not having earned a high school diploma or GED.

Compared to drug use patterns at the other sites, heroin use was somewhat more common among admissions to South Center, while crack cocaine use was especially prevalent among East programs clients. About 45% of South Center clients cited heroin as their primary problem drug, compared to 20-25% at the other programs. Crack cocaine was the primary drug used by two-thirds of East Center clients while an estimated 40-45% of those in the other programs were primary crack users.

APPENDIX C

The Perception of Legal Pressure Questionnaire

LEGAL CONDITIONS AND TREATMENT QUESTIONNAIRE

→ We are interested in your opinions about drug treatment and any legal conditions that apply to your participation in this program. We are asking these same questions of everyone and your answers will be analyzed for research purposes only. Everything you say is *entirely confidential* and will not be shown to anyone in this treatment program or working in the criminal justice system, such as DTAP staff, a judge or prosecutor, probation or parole officer, or TASC staff.

1. Were you referred to this treatment program by someone in the criminal justice system? Who? [probe: Who else on *this* case? Is TASC involved & how?]

(1a) _____ (1b-e) _____/_____/_____/_____

{0=no, 1=DTAP, 2=DA, 3=jdg/crt, 4=ATI pgm, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch.wlf, 10=other(specify)}

2. Is there someone in the criminal justice system who is supposed to be keeping track of your attendance in this program? [probe: Anyone else on *this* case?]

(2a) _____ (2b-e) _____/_____/_____/_____

{0=no, 1=DTAP, 2=DA, 3=jdg/crt, 4=ATI pgm, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch.wlf, 10=other (spec.), 11=yes/dk CJA, 12=dk}

3. Were you on probation or parole from an earlier case at the time of the current referral or are you involved in any other cases? Is any PO (or other agent) from another case supposed to be tracking you in some way? [probe for open family court cases, any CJ agents involved from other, *second* case; code yes only if CJA is supposed to be *tracking, monitoring* in treatment]

(3a) _____ (3b) _____

{0=no, 2=DA, 3=jdg/crt, 4=ATI pgm, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch.wlf, 10=other(specify)}

Are you involved in any other case where legal penalties or consequences would come into effect if you do not complete this program (if you split or are discharged)?

(3c) _____ (3d) _____

{0=no, 2=DA, 3=jdg/crt, 4=ATI pgm, 5=parole, 6=prob, 9=ch.wlf, 10=other(specify), 12=same case as above}

4. Has anyone (*not* in the treatment program but in the CJ system) explained to you *the rules or conditions of your participation* in treatment (such as how long you are supposed to attend treatment or what you can be kicked out for)? Who? Did anyone else (in the CJS) talk to you about this?

(4a) _____ (4b-e) _____/_____/_____/_____

{0=no, 1=DTAP, 2=DA, 3=jdg/crt, 4=ATI pgm, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch.wlf, 10=other (specify), 11=yes/dk CJA}

5. Has anyone (in the CJS) explained to you *what will happen if you fail to complete* the program (if you split or get discharged)? Who? Did anyone else (in the CJS) talk to you about this?

(5a) _____ (5b-e) _____/_____/_____/_____

{0=no, 1=DTAP, 2=DA, 3=jdg/crt, 4=ATI pgm, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch.wlf, 10=other(specify), 11=yes/dk CJA}

6. Did you make any promises *in court* (or to anyone in the CJS) that you would follow the rules and complete the treatment program? Who required you to do so?

(6a) _____ (6b-c) _____/_____

(1=DTAP, 2=DA, 3=judg/crt, 4=ATI, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch.wlf, 10=tx pgm, 11=other(sp.), 12=yes/dk CJA, 13=dk)

Did you *sign* any written agreement or contract stating that you would do so? Who required you to do so? Did you sign any other, similar agreements?

(6d) _____ (6e-f) _____/_____

(1=DTAP, 2=DA, 3=judg/crt, 4=ATI, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch.wlf, 10=tx pgm, 11=other(sp.), 12=yes/dk CJA, 13=dk)

7. Did you make any promises or agreements *in court* (or to anyone in the CJS) where you acknowledged what would happen -- what the legal consequence would be -- if you did not complete the program? Who required you to do so?

(7a) _____ (7b-c) _____/_____

(1=DTAP, 2=DA, 3=judg/crt, 4=ATI, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch.wlf, 10=tx pgm, 11=other(sp.), 12=yes/dk CJA, 13=dk)

Did you *sign* any written agreement or contract that stated what would happen if you did not complete? Who required you to do so? Did you sign any other similar agreements?

(7d) _____ (7e-f) _____/_____

(1=DTAP, 2=DA, 3=judg/crt, 4=ATI, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch.wlf, 10=tx pgm, 11=other(sp.), 12=yes/dk CJA, 13=dk)

8. Has anyone *in this treatment program* explained to you what will happen if you split the program or get kicked out? Who? What have they said? Has anyone else (staff or clients) in the program talked to you about this?

(8a) _____ (8b) _____

(0=no, 1=staff talks in general sense, 2=staff refers to specific case, 3=other clients, 4=other(specify))

9. Were you ever given a written explanation of rules or conditions of your participation in drug treatment? If so, by whom? By anyone else?

(9a) _____ (9b-c) _____/_____

(0=no, 1=DTAP, 2=DA, 3=judg/crt, 4=ATI, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch.wlf, 10=tx pgm, 11=other(sp.), 12=yes/dk CJA, 13=dk)

→ I'm now going to ask you a series of questions having to do with your understanding and opinions about what happens to mandated clients in treatment, and specifically what you think would happen *in your own case*. They all have to do with *hypothetical* situations and everyone we interview gets these same questions. [present, explain 0-100 chance scale; dk=999].

10. Just imagine, hypothetically, that you were *doing poorly in the program* -- not going to groups, getting in fights, breaking rules -- what do you think the chances are that *anyone working in the criminal justice system* (CJS) would find out you were not doing well? If there's some chance (>0), who is this person? Would anyone else (in the CJS) find out (not counting people you would tell on your own)?

(10a) _____ (10b-d) _____/_____/_____

(1=DTAP, 2=DA, 3=judge/court, 4=ATI, 5=parole, 6=prob., 7=defense, 8=TASC, 9=other(specify))

11. Let's just say, hypothetically, that you were using drugs *once a month*. What do you think the chances are that anyone working for this *treatment program* would find out you were using drugs (and you didn't tell them yourself)?

(11) _____

12. Now, in this imaginary case of you using drugs *once a month*, what do you think the chances are that anyone working *in the criminal justice system* would find out you were using drugs just once a month (and you didn't tell them)? If there's some chance (>0), who is this person? Would anyone else (in the CJS) find out?

(12a) _____ (12b-d) ____/____/____
 [1=DTAP, 2=DA, 3=judge/court, 4=ATI pgm, 5=parole, 6=prob., 7=defense, 8=TASC, 9=other(specify)]

13. If the treatment program discovered you were using drugs by getting a positive or a *dirty urine*, what do you think the chances are that anyone working *in the CJS* would learn about the dirty urine? If there's some chance (>0), who is this person? Would anyone else (in the CJS) find out?

(13a) _____ (13b-d) ____/____/____
 [1=DTAP, 2=DA, 3=judge/court, 4=ATI pgm, 5=parole, 6=prob., 7=defense, 8=TASC, 9=other(specify)]

If there's some chance that someone in the CJS would learn about the dirty urine, what are the chances that they would *learn about the dirty urine within one week*?

(13e) _____

14. Now consider the imaginary situation where you split the program or got kicked out. Pretend that you did not turn yourself in or inform anyone (in the CJS). What are the chances that anyone in the CJS *would learn that you had left the program within one week* (of your leaving)? Who in the CJS would learn that you had left the program? Would anyone else find out (not counting those you would tell)?

(14a) _____ (14b-d) ____/____/____
 [1=DTAP, 2=DA, 3=judge/court, 4=ATI pgm, 5=parole, 6=prob., 7=defense, 8=TASC, 9=other(specify)]

On average, *how long* do you think it would take before this person (14b) found out?

a day or less	a week or so	a month or so	2-5 months	6 months or more
(0)	(1)	(2)	(3)	(4) (dk=9)

(14c) _____

15. Now the next step. Pretend that you split the program or got kicked out and you took off -- you did not turn yourself in and tried to avoid apprehension. What are the chances that you would be apprehended and brought back into the custody of someone in the criminal justice system within *one month* of the time you split?

(15a) _____

(15b) And on average, *how long* do you think it would take before you would be returned to custody (if you split and did not turn yourself in)?

a week or less	a month or so	2-5 months	6-11 months	a year or more
(0)	(1)	(2)	(3)	(4) (dk=9)

(15b) _____

16. And finally, lets say that you split, were apprehended and were returned to custody. (No further crime was committed.) What are the chances that you would be *released* to the community (ROR'd, bailed) while you were waiting to be sent to jail, prison or back to drug treatment?

(16) _____

17. Imagine that a few weeks from now, you split or get kicked out of the program, you don't turn yourself in but end up being apprehended and brought back to custody. Please read over this list and pick the one that you think is *most likely to happen to you in your case*. What are the chances that this will happen to you?

- (1) I would be warned but given another chance and sent back to treatment.
- (2) I would be warned and sent back to treatment, but under closer supervision and more strict reporting requirements.
- (3) I would have to do some jail or prison time, but *less* time than what I was originally told I would do if I did not complete (split, got kicked out of) the program.
- (4) I would have to do *the same* prison time that I was originally told I would do if I did not complete (split, got kicked out of) the program.
- (5) I would have to do *more* prison time that I was originally told I would do if I did not complete (split, got kicked out of) the program.

(17a-b) _____ / _____
(1-5, dk=9) (0-100, dk=999)

18. Now just imagine that a few weeks from now, you split or get kicked out of the program and you *do* turn yourself in. Now read over this same list (#17) and pick the one that you think is *most likely to happen to you if you turned yourself in*. What are the chances that this will happen to you? (dk=9)

(18a-b) _____ / _____

19. Indicate how much you agree or disagree with the following statements. [Present, explain 1-5 agree/disagree scale. In questions referencing *legal agent*, use the person identified as monitoring the case (listed in *question 2*; if no one is listed in question 2, use person listed in question 1).]

- a. My *legal agent* made sure I clearly understood what would happen if I failed to complete this treatment program. _____
- b. Going after mandated clients who fail in drug programs is just *not* a high priority for most *legal agents*. _____

- c. If it turns out I really don't like the rules or other things about this program, I would *not* have a problem leaving the program and dealing with the consequences. _____
- d. The staff of this treatment program have a good understanding of my legal situation and what would happen if I failed the program. _____
- e. The *only* way for me to avoid doing jail or prison time right now is to stick with this treatment program. _____
- f. My *legal agent* has been very consistent in explaining to me what would happen to me -- what the consequences would be -- if I did not complete this program (if I split or got kicked out). _____
- g. My *legal agent* closely monitors my case and would be able to pull me back into custody right away if I failed this program. _____
- h. Having to do time in jail or prison would *not* really be all that hard for me right now. _____
- i. Every few weeks, someone working for this treatment program will be talking or writing to my *legal agent* about how I'm doing. _____
- j. What I hear from the treatment staff about what will happen to me if I split or get kicked out is different from what my *legal agent* tells me. _____

20. People enter drug treatment for many different reasons. Four common reasons are shown below. Read them over and then rank them in the order of their importance to you, in your *decision* to enter treatment at this time. (1=most important)

- a. Get help with schooling, housing and job training or placement. _____
- b. Gets me out of jail or prison; can avoid going to jail or prison. _____
- c. Get good medical care; get healthy. _____
- d. Get off drugs and straighten out my life. _____

21. People have different reactions to the penalties or consequences that are used in the criminal justice system. We want to know your opinion about those listed on these cards [show cards]. By assigning a score to each one, tell me *how undesirable each of these penalties is to you -- how hard it would be for you to deal with or tolerate* each one right now, at this time in your life. [explain anchor score and scale; higher score=more aversive, less able to tolerate]

standard or anchor score: *1 year of jail time = 100*

jail	prison	probation/ parole	drug treatment
(a) 1 week _____	(e) 1 year _____	(i) 1 year _____	(m) OP, 6 mos. _____
(b) 2 months _____	(f) 2 years _____	(j) 2 years _____	(n) OP, 1 year _____
(c) 6 months _____	(g) 3 years _____	(k) 3 years _____	(o) RES, 1 year _____
(d) 1 year <i>100</i>	(h) 5 years _____	(l) 5 years _____	(p) RES, 18 mos _____

22. From this list (in 21 above), which penalty or combination of penalties come closest to what *you have been told* will happen to you if you dropped out or were kicked out of this treatment program (what the consequence would be if you split)? [code closest and probe for more precise LOS known, if any; probe also for *second* case penalty that would apply, if any]

(22a) _____ (22b) specify: _____

Skip to 23 if prison not specified; if a prison sentence is specified: Do you know if this sentence in your case is mandated by law? [probe knowledge of predicate status; code yes if recognizes as *mandatory* sentence, *not* "mandated treatment"]

(22c) _____
[0=no, 1=yes, is predicate, 2=yes, other mandatory sentence (explain), 9=dk]

23. In your own opinion, what do you actually think would happen to you if you dropped out or were kicked out of the program and returned to custody. It may be what you've been told, it may be less harsh, it may be more harsh; what do you think would happen? [probe for more precise LOS for drug treatment time and/or custodial time if either is indicated]

(23a) _____
[return to drug tx: 0=no, 1=yes, 9=dk]

(23b) _____
[specify LOS in months for expected time in jail/prison, 99=dk]

specify: _____

24. What is your understanding of how your attendance in treatment will be monitored or supervised (by someone in the CJS)? [probe perceptions about type and frequency of contacts/reports between CJA and pgm, CJA and respondent; specify, code any other CJAs monitoring case]

(24a1) CJA: _____ (24b1) CJA: _____
[1=DTAP, 2=DA, 3=jdg/crt, 4=ATI pgm, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch.wlf, 10=other(spec.), 11=dk CJA]

(a2-a3) type/freq: ____/____ (b2-b3) type/freq: ____/____

(a4-a5) type/freq: ____/____ (b4-b5) type/freq: ____/____

(a6-a7) type/freq: ____/____ (b6-b7) type/freq: ____/____

[TYPE: 1=written reports, 2=phone, pgm→CJA, 3=phone, CJA→pgm, 4=visits tx site staff, 5=visits S at tx, 6=group S meeting
7=S reports out, 8=other (specify), 9=dk]
[FREQ: 1=once/month or more, 2=5-10/year, 3=2-4/year, 4=once/year, 5=other(specify) 6=dk]

- 25. Do you ever have to provide urine samples as part of your participation in this drug treatment program – either to the treatment program or to a criminal justice agent? If so, how often (on average)? [probe for who takes; how/if reported to CJA, etc.]

(a1-a2) who/rept: ____/____ (b1-b2) who/rept: ____/____
 [WHO: 0=tx pgm, 1=DTAP, 2=DA, 3=jdg/crt, 4=ATI, 5=parole, 6=prob, 7=TASC, 8=ch. w/f, 9=other(spec.), 10=yes/dk CJA, 11=dk]
 [REPT: 1=always to CJA, 2=never to CJA, 3=discret. to CJA, often, 4=discret to CJA, rarely, 5=other (specify), 6=dk]

(a3-a4) freq/freq: ____/____ (b3-b4) freq/freq: ____/____
 [FREQ: 1=once/month or more, 2=5-10/year, 3=<5 times/year, 4=when in community only, 5=when suspected only, 6=other(specify), 7=dk]

- 26. What is your understanding of what happens if you leave (split) the program – will anyone actually go out looking for you? If so, who? How do you think the typical person (under your type of legal supervision) gets returned to custody? [probe for multiple CJAs, and for each: dependence on re-arrests, agency's capacity to actually go looking for absconders, use of enforcement squad, etc.]

(a1) CJA: _____ (b1) CJA: _____
 [1=DTAP, 2=DA, 3=jdg/crt, 4=ATI pgm, 5=parole, 6=prob, 7=defense, 8=TASC, 9=ch. w/f, 10=other(spec.), 11=dk CJA]

(a2-a4) enf: ____/____/____ (b2-b4) enf: ____/____/____
 [1=issues warrant, 2=case officer/manager searches, 3=has special enfrcmnt sqd, 4=relies on std. warrant sqds, police, 5=other(specify), 6=dk]